Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In re Application of GTE Corporation, Transferor, And Bell Atlantic Corporation, Transferee, For Consent to Transfer Control of Domestic and International Sections 214 and 310 Authorizations and Application to Transfer Control of a Submarine Cable Landing License	CC Docket No. 98-184

PETITION FOR RECONSIDERATION

ATTACHMENT D

Order Instituting Rulemaking on the Commission's Own Motion into Monitoring Performance of Operations Support Systems. Order Instituting Investigation on the Commission's Own Motion into Monitoring Performance of Operations Support Systems.

Decision 02-03-023; Rulemaking 97-10-016 (Filed October 9, 1997); Investigation 97-10-017 (Filed October 9, 1997)

California Public Utilities Commission

2002 Cal. PUC LEXIS 190

March 6, 2002, Dated

PANEL: LORETTA M. LYNCH, President; HENRY M. DUQUE, RICHARD A. BILAS, CARL W. WOOD, GEOFFREY F. BROWN, Commissioners

OPINION: **OPINION ON THE PERFORMANCE INCENTIVES PLAN FOR PACIFIC BELL TELEPHONE COMPANY**

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OPINION ON THE PERFORMANCE INCENTIVES PLAN

I. Summary

By this decision, the California Public Utilities Commission (Commission or CPUC) adds the final piece to implement an operations support systems (OSS) performance incentives plan. This plan will provide incentives for an incumbent local exchange carrier n1 (ILEC) to give competitors equitable access to its OSS infrastructure. The plan consists of performance measurements established in Decision (D.) 01-05-087, performance criteria established in D.01-01-037, and the monetary incentives we now adopt. The plan measures, evaluates, and imposes monetary charges on an ILEC for OSS performance that could inhibit competition by disadvantaging the competitive local exchange carriers (CLECs). n2

----------Footnotes----------

n1 We adopt this plan today only for Pacific Bell Telephone Company(Pacific). In a forthcoming decision we will adopt the plan for Verizon, as discussed *infra*.

n2 Payments made as rate adjustment bill credits will be made to individual CLECs and the ratepayers, as discussed, *infra*.

----------End Footnotes----------

In this decision, we have established the following: (1) limits to an ILEC's "risk" n3 for poor OSS performance to CLECs and their customers; (2) how incentive payment amounts will be tied to different performance results and how payments will increase as performance worsens; (3) who will receive the incentive payments; (4) necessary adjustments to the statistical performance assessment model; and (5) other provisions necessary to complete a performance incentives plan appropriate for an initial implementation period.

----------Footnotes----------

n3 The total payment amounts generated by the performance incentives plan.

----------End Footnotes----------

As we explained in D.01-01-037, the Telecommunications Act of 1996 (TA96 or the Act) has guided the process of opening previously monopolistic local telephone service markets to competition. To foster competition, the Act requires ILECs to provide competing carriers access to ILEC OSS infrastructure, including the incumbents' pre-ordering, ordering, provisioning, maintenance, billing, and other functions necessary for providing various telephony services. For competition to occur, the CLECs must be able to access these services in the same manner as the ILEC.

For example, for pre-ordering, a CLEC must be able to access customer information relevant to the service being ordered, so that the CLEC can tell its customers what options they have. For ordering, a CLEC needs to be sure that the ordering process for its customers takes no more time than for ILEC customers. Similarly, for provisioning, a CLEC needs to be sure that the time the ILEC takes to actually install or provide a new telephone service for CLEC customers is no longer than for ILEC customers. Delays or inaccuracies in these and the other OSS functions could discourage potential customers from doing business with the competitors.

Under its authority to implement the Act, the Federal Communications Commission (FCC) has strongly encouraged establishment of regulatory incentives to ensure ILEC OSS performance does not present barriers to competition. While not an outright prerequisite for FCC approval of Regional Bell Operating Companies' (RBOC or BOC) applications to provide in-region interLATA service under § 271, the FCC has indicated that such applications must be in the public interest. In its evaluation of the public interest, the FCC states that, "the fact that a BOC will be subject to performance monitoring and enforcement mechanisms would constitute probative evidence that the BOC will continue to meet its section 271 obligations and that its entry would be consistent with the public interest." n4 As a consequence, we establish a performance incentives plan to identify and prevent or remove any competitive barriers. The three critical steps for any performance incentives plan are performance measurement, performance assessment, and the corrective actions necessary if performance is deemed harmful to competition.

----------Footnotes----------

n4 *Bell Atlantic New York Order ("FCC BANY Order"), 15 FCC Rcd at 3971, P 429.*

----------End Footnotes----------

The CPUC has established performance measures and performance assessment methods in parallel proceedings in this docket. Our decision today establishes a complete performance assessment plan. We have created a set of procedures for allocating payments by the ILEC when OSS performance to the CLECs is deficient. In effect, we have set forth a self-executing decision model that applies barrier-identifying criteria to the performance measurement results and charges the ILECs monetary amounts for deficient performance. A self-executing plan is one that requires no further review and no new proceedings. Explicit, objective, data-based standards were established in D.01-01-037 that automatically identify inferior performance to CLEC customers that present potential "competitive barriers." Statistical tests identify potential barriers when ILEC performance to its own customers can be compared to ILEC performance to CLEC customers. Explicit performance levels, called benchmarks, identify potential barriers when there is no comparable ILEC performance.

This decision now completes the final step of the incentives plan for Pacific, establishing the incentives that will be tied to any deficient performance identified by the model. The overall goal of the plan will be to ensure compliance with the FCC's directive that OSS performance shall provide competitors a true opportunity to compete.

II. Background

On October 9, 1997, the Commission instituted this formal rulemaking proceeding and investigation to achieve several goals regarding Pacific's and Verizon California Inc.'s (Verizon) n5 OSS infrastructure. One objective of this docket (the OSS OII/OIR) is to assess the best and fastest method of ensuring compliance if the respective OSS of the ILECs do not show improvement or meet pre-determined standards of performance. Another related objective is to provide appropriate compliance incentives under Section 271 of TA96, which applies solely to Pacific, n6 for the prompt achievement of OSS improvements.

----------Footnotes----------

n5 Verizon was previously named GTE California Incorporated. Hereafter, Pacific and Verizon will be referred to collectively, as the ILECs.

n6 As a Bell Operating Company (BOC), Section 271 specifically applies to Pacific.

----------End Footnotes----------

To further these specific objectives, the ILECs and a number of interested CLECs have collaborated in the OSS OII/OIR proceeding and the 271 review process. n7 The work and accomplishments in these proceedings that relate to performance incentives plan development have been summarized in D.01-05-087 (performance measurements) and D.01-01-037 (performance assessment or evaluation).

----------Footnotes----------

n7 From July through mid-August 1998, Pacific, AT&T Communications of California Inc. (AT&T), MCI WorldCom (MCI W), Sprint Communications, Electric Lightwave, Inc., ICG Telecom Group, Inc., Covad Communications (Covad), MediaOne Telecommunications of California, Inc., Cox California Telecom, LLC, Northpoint Communications, California Cable Television Association, and staff entered into a collaborative process and jointly worked on developing solutions to the flaws in Pacific's 1998 draft 271 application. Verizon observed one collaborative meeting on penalties, but otherwise did not participate. (Verizon Response to Motion to Accept Joint Comments regarding Report on Performance Incentives, footnote 2 at 2 (October 20, 1998)).

----------End Footnotes----------

Following the Commission's adoption of the performance assessment model on January 18, 2001, Administrative Law Judge (ALJ) Reed convened a three-day facilitated workgroup on February 7, 8, and 9. n8 The purpose of the workshop was to begin development of a payment structure that would determine the recipients and the amounts of payments (performance incentives) by the ILECs for deficient OSS performance. Specifically, the workshops were convened to seek agreement on the scope, issues, principles or goals, elements, and concepts for the payment structure. The ALJ's ruling also presented an initial list of issues for this phase of the proceeding. In a ruling on March 2, 2001, the ALJ summarized the results of the three days. Attached to the ruling were thirteen documents identified as 2001 CPUC Workpapers # 16 through # 28. Workpapers # 16 through # 18 listed the incentive plan issues, goals, and elements discussed by the workgroup. Parties collectively edited these documents to achieve a common understanding of the concepts presented. n9 However, as the ALJ stated in her ruling, these documents did not necessarily represent any agreement between parties or any parties' position, but provided an informal guide for the parties to assess the completeness of any subsequent performance incentives plans.

----------Footnotes----------

n8 *Administrative Law Judge's Ruling Scheduling Facilitated Work groups in the Performance Incentives Phase*, issued January 26, 2001.

n9 Pacific Bell submitted Workpapers # 19, # 20, # 22, and # 23, the CPUC Office of Ratepayer Advocates (ORA) submitted Workpaper # 24, and the CLECs submitted Workpapers # 25 and # 26 to illustrate concepts these respective parties believed to be important for any plan. Pacific, the CLECs, and Verizon each submitted plan drafts identified as Workpapers # 21, # 27, and # 28, respectively. While the ALJ's ruling convening the workgroup did not solicit plans from the parties, these parties elected to submit plans for discussion purposes during the workgroup sessions.

----------End Footnotes----------

At the end of the workgroup sessions, the parties discussed different schedules for plan submission and a comment period. No agreement was reached. Pacific insisted on an eight-week schedule. The CLECs insisted on a minimum of twelve weeks. On March 2, 2001, Pacific filed a motion asking the Commission to expedite the plan development process by approving an updated version of the plan it submitted during the workgroup sessions. On March 9, 2001, Pacific filed a correction to its proposed plan. On March 12, 2001, the CLECs submitted a motion requesting that the Commission "establish an appropriate schedule for the consideration of an incentives program," or in the alternative, deny Pacific's motion. On March 20, 2001, the assigned Commissioner issued a ruling (ACR) setting a schedule for submitting and commenting on plan proposals from the parties. The ACR allowed time for all active parties to file updated plans and specified a schedule and guidelines for Pacific and Verizon "running" the plans on historical OSS performance data n10 as well as data simulating different performance levels. n11 The purpose of these data runs was to determine the outcomes of the various plans given historical and potential future performance. Minor adjustments to the ACR's schedule had to be made to allow parties to make corrections to their plans and then to provide comment opportunities. The data runs and comments were completed by June 8, 2001. Appendix A lists the filings that contain each party's latest plan, the data runs for each plan, and the subsequent filings that contain parties' comments on these plans.

----------Footnotes----------

n10 Pacific calculated these figures. Due to parties' insistence that performance data is proprietary, all parties have not had access to all the data. Only Pacific and Verizon have had access to all the data necessary to complete the historical data runs.

n11 Anticipating that actual performance would change over time, the ACR requested simulated data runs in order to assess how the different plans would address improving or deteriorating performance. Since the simulations depended on actual "sample sizes" and parties also consider this information proprietary, Pacific and Verizon were also the only parties in the position to complete the simulation runs.

----------End Footnotes----------

III. The Proposed Plans

Pacific, Verizon, ORA, and the CLEC group each filed a different plan. The monetary outcomes varied greatly. Figure 1 shows the different monetary amounts that each plan would require Pacific to pay per month under the performance conditions Pacific and CLECs experienced in the last quarter of 2000. n12 Figure 2 shows the amounts that would be paid per year under different assumptions about future performance. n13

----------Footnotes----------

n12 These results were calculated by Pacific and Verizon. Under these proposed plans, payments would go to the individual CLECs and to either the ratepayers or the State General Fund as discussed, *infra*.

n13 Figure 2 projections were calculated without the log transformations that will be used in the actual plan. Logistical problems made retroactive data transformation prohibitively difficult for the earlier months in 2000; thus, only the last three months' data were transformed. Figure 1 shows the last three months with transformed data.

Appendix B presents data that allows comparison of the last three months with and without transformations. Appendix B also provides charts of the payment amount data with aggregate failure rate data.

----------End Footnotes----------

[See Figure 1 Projected Incentive Payments for Pacific by Month for Last Quarter of 2000 With log transformations in Original]

[See Figure 2 Plan Payments Projected for Pacific for Stimulated Performance Otucomes in Original]

We summarize each proposed plan briefly by discussing the primary components of the plans and the major differences between them. The complete details of each proposed plan were filed in this proceeding as noted below in the discussion of each plan.

A. Pacific's Proposed Plan

Pacific's proposed plan is documented in its March 23, 2001 filing in this proceeding. n14 Pacific's performance incentives plan has a monthly payment cap equal to three percent of its annual net return from local exchange service. Thus, on a yearly basis, the maximum available payment amount would equal thirty-six percent of Pacific's annual net return from local exchange service. These amounts are approximately $ 46 million monthly and $ 550 million yearly. n15 However, the full amounts would not be paid absent a formal Commission review. A maximum of $ 10 million total per month and $ 3 million per CLEC per month could be paid without review in a formal proceeding. Pacific Plan at 3, (March 23, 2001).

----------Footnotes----------

n14 *Pacific Bell Telephone Company's (U 1001 C) Submission of Performance Remedies Plan*, ("Pacific Plan"), filed March 23, 2001.

n15 Pacific's net return for local exchange service in the year 2000 was $ 1,527,942,000 Thirty-six percent of this amount is $ 550,059,120. Three percent of this net return amount is $ 45,838,260. See Appendix C (ARMIS 43-01 Cost and Revenue Table).

----------End Footnotes----------

Pacific's plan pays Tier I assessments to the CLECs, and Tier II assessments to either the CLECs or a public fund. Tier I assessments are based on each CLEC performance result regardless of the volume of transactions. For example, if one CLEC's results are identified for payment on a sub-measure such as phone service provisioning, and it had 10 transactions (in this case provisioning orders), and another CLEC's results for the same sub-measure are identified for payment based on 300 transactions, the payments would be equal. Pacific's plan would not adjust payments based on the severity of poor performance. Tier II assessments are made by combining all CLEC results for each sub-measure to create an industry-wide assessment of sub-measure performance. Only sub-measures with an all-CLEC total of 30 transactions or more are assessed for Tier II payments. *Id.* at 11.

Pacific's plan "forgives" statistically identified failures that under optimal conditions could be attributed to random variation. n16 With the 0.10 critical alpha required by D.01-01-037, under these optimal conditions we should expect an *average* of 10 percent of the statistical test results to be identified as performance failures even when parity exists. n17 Pacific's plan assumes that the percent of failures will vary from the ten percent average each month, and bases its number of "forgiven" failures on a statistical estimate, "F," representing the most failures that can be expected ninety percent of the time. n18 *Id.* Thus for single-month performance results, Pacific's plan requires no payments when "F" or fewer tests fail. Currently, fewer than "F" tests are failing each month. n19 When more than "F" tests fail, Pacific's plan will only require payments for the number of failures that exceed "F." For example, if "F" represented twelve percent of the statistical tests, and fourteen percent of the tests failed, Pacific would only be assessed payments for two percent of the test results.

----------Footnotes----------

n16 Pacific states that these optimal conditions would be: (1) all sub-measures operating at exact parity, (2) all the assumptions of the statistical tests are satisfied, and (3) all the sample sizes are large. *Pacific Bell Telephone Company's (U 1001 C) Reply Comments on Commission's Initial Report on OSS Performance Results Replication and Assessment* ("Pacific Repl. Comm. OSS Results"), July 6, 2001 at 5.

n17 When performance is equal except for random variation.

n18 At parity, one month might result in 11 percent failures, then next 9 percent failures, and so forth. Pacific's "F" table value represents the number of failures that could be expected under parity conditions, except for the highest ten percent of the time. For example, if out of one hundred monthly assessments under parity conditions we would expect statistically to fail greater than 15 percent of the measures less than ten percent of the time, then "F" would be set to 15 percent.

n19 For the months October through December 2000, Pacific performance averaged a statistical test failure rate of 9.6 percent, as illustrated in the Telecommunications Division's *Initial Report on OSS Performance Results Replication and Assessment* (Init. Rept. on OSS Perf.), June 15, 2001 at 18. More recent performance data obtained by staff from Pacific for May 2001 shows a statistical test failure rate of 8.8 percent.

----------End Footnotes----------

The payment amounts in Pacific's plan are also based on the pervasiveness of poor performance. n20 Specifically, the payment amounts increase as the percentage of statistically identified "failures" that exceed the number of "forgiven failures" increases. For example, if out of 100 results for a particular CLEC in one month there were twenty-two total identified failures with fourteen "forgiven" failures and eight "unforgiven" failures, the net failure percentage would be 9.3 percent. n21 In this case, Pacific's plan would assess a $ 100 Tier I payment for each of the "unforgiven" eight failures. *Id.* at 12. In this same example, if there were twenty-three total identified failures, there would be nine "unforgiven" failures with a net failure percentage of 10.5 percent. n22 With this outcome a $ 200 Tier I payment for each of the "unforgiven" nine failures would be assessed. *Id.* Payments range between $ 100 and $ 2000 per failure, depending on the degree of pervasiveness. The Pacific plan also assesses payments for repeated failures. Payments for three consecutive monthly ("chronic") failures range between $ 250 to $ 6000 and payments for six consecutive monthly ("extended chronic") failures range between $ 400 and $ 7000, depending on the degree of pervasiveness. *Id.*

----------Footnotes----------

n20 "Pervasiveness" refers to the extent of poor performance to a CLEC's customers. Pervasiveness is generally defined as the percentage of the total number of results that fail.

n21 In this example, 22 failures exceed the 14 allowed failures by 8 failures, which represents 9.3 percent of the total results excluding the forgiven failures:

(22 - 14)/(100 - 14) = .093, or 9.3 percent.

n22 In the second example, 23 failures exceed the 14 allowed failures by 9 failures, which represents 10.5 percent of the total results excluding the forgiven failures:

(23 - 14) /(100 - 14) = 0.105, or 10.5 percent.

----------End Footnotes----------

Pacific does not explain how these dollar amounts were derived. However, Pacific presents an estimate of the economic impact of non-parity performance and asserts that the payment amounts generated by the plan exceed the economic impact of non-parity. For example, while Pacific's plan would assess a $ 497,900 total payment for year 2000 performance, which passed "just under 90%" of the sub-measures, Pacific estimates that the "upper bound" of economic harm to the CLECs for much worse performance would only be $ 219,080. n23

----------Footnotes----------

n23 Seventy percent pass rate. See Pacific Open. Comm., May 18, 2001 at 11-12.

----------End Footnotes----------

Pacific proposes several conditions for applying a "conditional" 0.20. critical alpha level. n24 The conditional alpha level would be used only for the monthly statistical tests that are used to identify Tier II assessments. Tier II assessments are limited to industry aggregate sample sizes of thirty cases or more that fail three consecutive months and exceed the permissible failure rate allowed by the mitigation provisions. Tier II payments range from $ 500 to $ 8000 per "unforgiven" failure depending on failure pervasiveness. *Id.* at 10-12.

----------Footnotes----------

n24 In the *Interim Decision* we directed parties to propose conditions for using a 0.20 critical alpha level to increase test power. *Interim Decision*, January 18, 2001, at 147, Ordering Paragraph (OP) 14. Our use of the term "alpha level" refers to the probability that random variation would produce results identified as "failing" even though OSS processes were operating fairly. ("Failing" results refers to poorer OSS performance for CLEC customers as compared to ILEC customers, i.e., results that are statistically significant.) For example, because of "the luck of the draw" (random variation), CLEC customers might receive worse service, i.e., longer phone service installation times, even though there was no discrimination in any aspect of the ILECs' installation assignments, services, etc. The alpha level is a measure of a decision error, or Type I error. "Critical alpha level" refers to the maximum error that will be accepted in a decision. A statistical test calculates alpha probabilities for a performance result. Any result with an alpha probability that exceeds the critical alpha level (e.g., in this case, 0.22 would exceed the critical alpha level of 0.20) would not be deemed a performance "failure" even though actual performance to CLEC customers was worse than service to ILEC customers. On the other hand, any result with an alpha probability less that the critical alpha level (e.g., in this case, 0.18) would be deemed a performance "failure." In other words, in identifying performance as failing, we would only accept a twenty percent or less chance that random variation, and not actual discrimination, caused the poorer performance result. See also, *Interim Decision*, January 18, 2001, at 59-69 and 70.

----------End Footnotes----------

B. CLEC Proposed Plan

The CLEC's proposed plan is documented in its May 11, 2001 filing in this proceeding. n25 The CLEC's performance incentives plan has the same monthly payment cap as Pacific's. As noted in the above description of Pacific's plan, these amounts are approximately $ 46 million monthly and $ 550 million yearly. n26 As with Pacific, the full payment amounts are not available without a formal review. In contrast to the Pacific plan, the CLEC plan would place a limit, or "procedural cap," only on Tier I payments that were neither severe nor chronic (repeated). The procedural cap would be $ 10 million total per month with no limit for individual CLECs. CLEC Plan at 20-21, (May 11, 2001).

----------Footnotes----------

n25 *Revisions to Participating Competitive Local Exchange Carriers' Performance Incentives Plan*, ("CLEC Plan"), filed May 11, 2001.

n26 The CLECs' calculations were based on 1999 data. CLEC Plan, May 11, 2001 at 12. The calculations here are based on 2000 data as listed in Appendix C.

----------End Footnotes----------

In the CLEC's plan the ILECs would pay Tier I assessments to the CLECs, and Tier II assessments to a public fund. Similar to Pacific's plan, Tier I assessments are not adjusted by transaction volumes, and Tier II assessments are made by combining all CLEC results for each sub-measure to create an industry-wide assessment of sub-measure performance. However, in contrast to Pacific's Tier II proposals, payments can be assessed without repeated failures, and the smaller transaction volume sub-measures are not excluded. Also in contrast to Pacific's plan, the CLEC plan would adjust payments based on the severity of the performance "failure," although the CLEC plan does not use a direct measure of severity. The plan uses a method based on statistical failure probability estimates. Essentially, the CLEC

plan interprets lower p-value statistical failures as more severe failures, based on the premise that as failure severity increases, the statistical test will produce lower p-values reflecting the decreased likelihood of severe occurrences under parity conditions. *Id.*, at 7-8.

The CLEC's plan also "forgives" some statistically identified failures. While the stated "forgiveness" percentage is fifteen percent, it does not apply to aggregated small samples or to severe failures. As a consequence, the actual "forgiveness" percentage is not evident and must be calculated from the data. For example, if fifteen percent of the sub-measures were to fail and half the failures were severe, then the forgiveness rate would be 7.5 percent. Consequently, we cannot determine how this "forgiveness" mechanism compares to Pacific's ten-percent mechanism. However, as we discuss later in this decision, the relative impact of the different forgiveness mechanisms can be compared by examining the overall plan results as presented in Appendix B.

The CLECs propose that a 0.20 critical alpha be applied to small sample sizes. The application is limited by the condition that sample sizes do not reach 30 cases. The CLECs' intent was to increase test power where it is most needed, small samples. Apparently recognizing the congruent problem of too much power, the CLECs have offered to decrease test power for the industry-aggregate performance results (Tier II) by using a smaller critical alpha, 0.05. *Id.* at 5-7 and 16-17. The CLECs justify their Tier II smaller alpha by pointing out that industry-aggregates samples are likely to be larger than individual CLEC samples, and thus already have greater test power. *Id.* at 5.

C. Verizon's Proposed Plan

Verizon's proposed plan is documented in its May 4, 2001 filing in this proceeding. n27 Verizon's performance incentives plan sets monthly payment caps for the first three years based on the Verizon (GTE-Bell Atlantic) merger conditions. n28 Verizon's proposed annual maximum possible cap is $ 19.8 million the first year, $ 29.7 million the second year, and $ 39.6 million the third year. The monthly caps are one-twelfth of these amounts, 1.65 million, 2.475 million, and 3.3 million, for the respective years. In contrast to the Pacific and CLEC plans, the full payment amounts are available without a formal review.

----------Footnotes----------

n27 *Revised Interim Verizon Performance Plan for the State of California*, ("Verizon Plan"), filed May 4, 2001.

n28 *Re GTE Corporation and Bell Atlantic Corporation, Application for Consent to Transfer Control, etc*, FCC 00-221, CC Doc. No. 98-184, Memorandum Opinion and Order, June 16, 2000, Attachment A-6, p. A-6-1; as cited in Verizon Plan at 9, (May 4, 2001).

----------End Footnotes----------

In Verizon's plan the ILECs would pay Tier I and II assessments to the CLECs. In contrast to Pacific's plan, Tier I assessments are based on transaction volumes. Generally, payments are based on the number of CLEC customers who experience service worse than the average level for ILEC customers. Verizon's Tier II assessments are the same as Pacific's, except that Verizon specifies that payments go to the CLECs. Verizon Plan at 15-16.

The Verizon plan would adjust payments based on the severity of the performance "failure." Severity is determined by a similar metric as the one used to adjust payments by transaction volumes. The percentage of CLEC customers who experience service worse than the average level for ILEC customers determines severity. The severity calculation increases as the percentage of disadvantaged CLEC customers increases. *Id.* at 11-14.

Verizon's plan also "forgives" some statistically identified failures for Tier I results. Similar to Pacific's "F" value described earlier, Verizon has created a "K" table that specifies the number of permitted failures depending on the number of submeasure results for a CLEC in a month. The "K" table allows between about thirteen and twenty percent of the submeasure results to be "forgiven." For example, if a CLEC had fifteen submeasure results in one month, then three (twenty percent) could be forgiven if they failed. If a CLEC had 236 submeasure results in one month, then thirty (12.7 percent) could be forgiven if they failed. *Id.*, App. D. at 32.

Verizon's plan also differs from the other plans in that it pays on a smaller set of performance measures. While other plans exclude some measures consistent with the *Interim Opinion*, Verizon excludes several additional measures because it views them as redundant or correlated to other paying measures. *Id.* at 4-7. Verizon's conditional 0.20 critical

alpha proposal is the same as Pacific's except that Verizon specifies that Tier II payments would go to the CLECs, with no option for payment to a public fund as Pacific provides.

D. ORA's Proposed Plan

ORA's proposed plan is documented in its May 4, 2001 filing in this proceeding. n29 Unlike the other parties, ORA's has not included payment caps in its performance incentives plan. ORA is concerned that payment caps can result in disincentives for good service:

"Payment caps not only cap payments, they also place a cap on service improvements. Service is effectively capped because both absolute and procedural caps provide the ILEC with an incentive to allow service to deteriorate once the cap is reached." ORA Plan at 11, (May 4, 2001).

----------Footnotes----------

n29 *Updated Interim Incentive Model*, ("ORA Plan"), filed May 4, 2001.

----------End Footnotes----------

In contrast to other plans, ORA's preferred plan would have the ILECs pay assessments primarily to individual ratepayers. ORA bases its payment distribution on the principle that payments should go to "the same entities (primarily business and residential ratepayers) who are paying for the infrastructure changes and upgrades that the ILECs assert were required to effectuate local exchange competition." *Id.* at 3. ORA's preferred plan would have the ILECs pay ninety-three percent of the assessments to individual ratepayers, one percent to the CLECs, and six percent to interexchange carriers (IECs). *Id.* at 4. ORA's plan does not have different tiers, as do the other plans. ORA's plan is entirely based on individual CLEC sub-measure results each month, similar to the Tier I structure of the other plans. *Id.* at 11.

Similar to Pacific's and the CLECs' plans, ORA's assessments are not adjusted by transaction volumes. Similar to the CLECs' plan, the ORA plan would adjust payments using statistical test outcomes as indirect performance "failure" severity measures. *Id.* at 11-12. In contrast to the other plans, ORA's plan does not forgive any statistically identified failures. Additionally, ORA's plan does not specify a *conditional* 0.20 critical alpha level. While ORA's plan lists a 0.20 alpha level, it gives no indication of when it is to be used. *Id.* at 7, 16-18, and 23-24.

IV. Discussion

A. Payment Caps

Both Pacific and the CLECs recommend an annual payment cap of thirty-six percent of the annual net return from local exchange service. Pacific Plan at 16; CLEC Plan at 12. This is the same percentage amount as implemented in four of the seven states that have obtained Section 271 approval, and is very close to the amounts in two other states. n30 Verizon proposes smaller amounts. n31 ORA proposes that there should be no cap. We are not persuaded by either ORA's or Verizon's presentations, and find no reason to depart from the precedent set in the states with Section 271 approval. n32 Given the wide variation of payment amounts that the various plan proposals have generated in this proceeding, we believe it unwise to have no cap at all. Adopting a reduced amount could weaken the incentive effect of an incentives plan. Having no cap could subject an ILEC to unintended and virtually unlimited financial liability. Regarding ORA's concern that a cap could become a disincentive for performance improvements, the FCC has pointed out that no incentive plan needs to be sufficient, standing alone, to counterbalance an ILEC's incentive to discriminate. n33 For the above reasons, we adopt the absolute caps defined as thirty-six percent of net return from local exchange service. These amounts will be calculated from the most recent ARMIS data and updated each year as soon as new data is available.

----------Footnotes----------

n30 Payment caps in New York, Texas, Kansas, and Oklahoma are 36% of net return. *Bell Atlantic New York Order ("FCC BANY Order"), 15 FCC Rcd at 3971, P 436; SWBT Texas Order ("FCC Texas Order"), 15 FCC Rcd at 18354, P 424; SBC Kansas-Oklahoma Order ("FCC Kansas-Oklahoma Order"), 16 FCC Rcd at 6237, P 274.* The

payment cap in Massachusetts is 39% of net return. *Verizon Massachusetts Order ("FCC Massachusetts Order"), 16 FCC Rcd at 9118, P 241 and fn. 769.* The payment cap in Connecticut is proportional to the New York amount, based on the relative number of lines. *Verizon Connecticut Order ("FCC Connecticut Order"), 16 FCC Rcd at 14181, P 76; Application By Verizon New York For Authorization To Provide In-Region, Interlata Services In Connecticut*, at 78 (April 23, 2001). Payment caps have yet to be established in Pennsylvania. *Verizon Pennsylvania Order ("FCC Pennsylvania Order"), 16 FCC Rcd at 17489, P 130, fn. 445.*

n31 Verizon proposes approximately $ 20 million, $ 30 million, and $ 40 million annual payment caps in the first, second, and third years of incentive plan operation. In contrast, given that Verizon's net return from local exchange service is $ 461,450,000, a cap consistent with the Pacific and CLEC proposals in California, and consistent with Section 271 approvals in other states, would be thirty-six percent of this amount, or about $ 166 million. See Appendix C (ARMIS 43-01 Cost and Revenue Table).

n32 In their comments to the draft decision, the CLECs ask us to adopt a cap of thirty-nine percent of net return, stating that recent 271 applications have included this increased percentage. *Opening Comments of the Participating Competitive Local Exchange Carriers on the Draft Decision Adopting a Performance Incentives Plan* ("CLEC Open. Comm. DD"), December 28, 2001. However, the record in this proceeding is insufficiently developed for us to know whether the conditions leading to the increased caps apply to Pacific and California. Consequently, we deny the CLECs' request.

n33 The FCC lists other remedies that can be applied. See FCC BANY Order, P 435.

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Pacific and the CLECs also propose "procedural caps" that limit the payment amounts without formal review. It is notable, however, that Verizon's monthly payment cap amounts are about the same as Pacific's procedural cap amounts when pro-rated by the two companies' different annual net return amounts. n34 While we appreciate that our incentive plan should be self-executing without time consuming delays for reviews, we realize that unforeseen circumstances can arise that might place an ILEC in a financially liable situation that we might not intend. We will adopt procedural caps to help balance the need for self-executing payments with the need to protect against unintended financial liability. We agree with Pacific that these caps should have no exclusions. n35 We will adopt procedural payment caps proportionate to those in New York and Texas because the California procedural payment caps should reflect the larger net return amounts at stake. We will adopt total monthly procedural payments caps of $ 15 million and $ 4.5 million for Pacific and Verizon, respectively. We will not adopt individual payment limits to individual CLECs, as we do not have sufficient record evidence and justification for such limits.

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n34 With Pacific's annual net return at $ 1.5 billion and a proposed monthly cap of $ 10 million, if Verizon had set a comparable procedural cap relative to its net return of $ 461 million, it would be $ 3 million per month, would exceed the absolute cap for the first two years, and would be about the same as the absolute cap for the third year.

n35 *Pacific Bell Telephone Company's (U 1001 C) Opening Comments on Performance Remedies Plan (May 18, 2001)* at 22-23 ("Pacific Open. Comm.").

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B. Mitigation

Since statistical tests do not eliminate all the error associated with performance assessment decisions, several parties have pressed for provisions that reduce, or mitigate, the remaining error. These mitigation provisions essentially would allow a certain number of statistically-identified performance failures to be "forgiven," under the rationale that random variation, not inferior performance, would cause some failure identifications.

As discussed at length in D.01-01-037, our January 18, 2001 decision (*Interim Opinion*) establishing the statistical model for identifying deficient ILEC OSS performance, statistical tests can only provide estimates of the likelihood that a decision made about any given performance result might be in error. *Interim Opinion* at 59-69. Our *Interim Opinion* discussed the two fundamental types of error, Type I and Type II error. Type I error occurs when OSS processes for

ILEC and CLEC customers operate at parity, but random variation causes us to identify the results as inferior for CLEC customers (non-parity). We set a cut-off point limiting the likelihood of a Type I error at 10 Percent (0.10 critical alpha). Thus under ideal conditions, n36 we will label parity performance as non-parity performance ten percent of the time. We did not set the critical alpha to be smaller because in doing so we increase Type II error. Type II error occurs when an OSS process for CLEC customers is inferior to that provided ILEC customers, yet our statistical decision identifies the results as parity performance. Our analyses determined that while Type I error was fixed at ten percent, Type II error far exceeded that amount. *Interim Opinion*, Appendix F. We instructed parties to propose ways to strike a better balance between Type I and Type II errors by proposing conditions for using a 0.20 critical alpha, which would decrease Type II errors. n37

----------Footnotes----------

n36 As discussed *infra*, measurement conditions are not ideal.

n37 Contrary to concerns raised by Pacific's comments on the draft decision, we have not instructed parties to achieve an actual balance of Type I and II errors or probabilities in their proposals for this decision. *Pacific Bell Telephone Company's (U1001 C) Opening Comments on Draft Decision on the Performance Incentives Plan* ("Pacific Open. Comm. DD"), December 28, 2001 at 7, 13. We have only instructed parties to apply a 0.20 critical alpha to a result subset to *reduce* the previously documented *imbalance* of probabilities. *Interim Opinion*, App. F. Even if the increased Type I error rate of 0.20 was applied to all parity tests, the average Type II error rate would still be twice as large even when we limit detection to performance two times worse to CLEC versus ILEC customers. *Id.* App. F at 2. Parties have been instructed to attempt actual alpha/beta balancing only after the current plan has been in effect. *Interim Opinion* at 147.

----------End Footnotes----------

However, the new provisions the ILECs have proposed in response to our instructions in the *Interim Opinion* only reduce Type I error. n38 Pacific and Verizon have proposed that failure identifications equal to the number of expected Type I errors be forgiven. For the monthly identifications, which have a ten percent critical alpha, Pacific and Verizon propose incentive payments only when the number of failure identifications exceeds ten percent. n39 That is, at least ten percent would be forgiven. Pacific's Plan at 9-11; Verizon's Plan at 31-32. For the repeated failure identifications, Pacific proposes that a percentage equal to or greater than the resultant critical alpha be forgiven for three-month consecutive failure identifications, but not for six-month identifications. The resultant three-month failure identification critical alpha is 0.001, or 0.1 percent. n40 Pacific does not propose forgiveness for six-month failures because the resultant Type I error is negligible. Pacific Open. Comm. at 17. For example, with a monthly 0.10 critical alpha, the six-month resultant critical alpha would be 0.000001, or one-in-a-million. n41 With approximately 4,000 tests per month, erroneous failure identifications would be extremely rare.

----------Footnotes----------

n38 *Interim Opinion* at 147. While both ILECs propose a conditional 0.20 critical alpha level, their proposals only extend to consecutive failures, which increase Type II error relative to Type I error. We discuss this further in a subsequent section below.

n39 The actual percentage is greater than ten percent as we discuss later in this decision, but for the purposes of illustration here we use the ten percent figure.

n40 For example, out of 1000 statistical tests, with a critical alpha of 0.10, in the first month we would expect 100 failures to be identified even though true parity exists. Because these errors are random under parity, we would not expect all the same to be identified the second month. We would again expect 10 percent to be identified, resulting in 10 remaining failure identifications. The third month we would again expect ten percent of the remaining identifications to be identified, resulting in one remaining identification. This resultant critical alpha can be calculated by multiplying the monthly critical alphas (0.10 x 0.10 x 0.10 = 0.10<3> = 0.001, or 0.1%).

n41 10<6> = 0.000001, or 0.0001 percent.

----------End Footnotes----------

We must confront two issues in deciding whether to include a Type I mitigation component in the plan we establish today. First, any mitigation proposal must be viewed in the context of both Type I and Type II error. While Type I error mitigation may be rationally justified for reducing Type I errors under parity conditions, its justification is less clear under non-parity conditions. In short, we must examine how Type I error mitigation affects Type II error. Second, we must know that the statistical test assumptions behind the rationale for the mitigation plans are satisfied. For example, it was apparent during deliberations on the *Interim Opinion* that available statistical applications are not perfect. The question for us now is whether any un-met assumptions for those tests will distort the normal relationship between the critical alpha and the expected number of Type I errors.

1. Type II Error

As stated in the *Interim Opinion*, with Type I error fixed at ten percent, we found that estimates for Type II error were much higher. n42 Since Type II error only can occur when OSS processes are not operating at parity, it is critical to examine current OSS performance. If we could be confident that parity exists, then we could be confident that mitigation plan use would be advised at least in the short term. However, if we find evidence for non-parity, then we must ensure that using a mitigation provision will not cause undue forgiveness of performance needing remediation.

----------Footnotes----------

n42 These estimates were based on selected alternative hypotheses. That is, two estimates were made: What would the Type II error be if (1) performance was 50% worse for the CLECs, or (2) performance was 100% worse for the CLECs. *Interim Opinion*, App. F. at 2, Tables 1 and 2.

----------End Footnotes----------

On June 15, 2001, the Telecommunications Division issued a report examining Pacific's OSS performance for October through December 2000. n43 Those months were the most recent months available when staff began its study. We now have the benefit of that report and the parties' comments. The report concluded that there were two sources of evidence for non-parity. First, the distribution of p-values provided evidence for both inferior and superior non-parity performance. Init. Rept. on OSS Perf. at 7-9. Second, the incidence of chronic performance failures provided additional evidence for inferior non-parity performance. *Id.* Because of this evidence indicating that Type II errors are likely, we are reluctant to mitigate Type I error further than we already have. n44

----------Footnotes----------

n43 *Initial Report on OSS Performance Results Replication and Assessment*, ("Init. Rept. on OSS Perf."), California Public Utilities Commission, Telecommunications Division, June 15, 2001.

n44 We note that we have already built in considerable protection against random variation. As we discussed in the *Interim Opinion*, even when OSS performance to CLEC customers is worse than performance to ILEC customers, a performance failure is not identified unless the result passes a statistical test. All the instances where CLEC customers receive worse OSS performance are essentially "forgiven" if the statistical test criteria are not met. For example, in December 2001, individual CLECs collectively received poorer service on twenty-eight percent of the sub-measures. Since the 0.10 critical alpha criterion is only met by about eight percent of the results, our "forgiveness" rate is about twenty percent.

----------End Footnotes----------

Verizon is critical of our attention to Type II errors, but neglects to recognize the core problem. Verizon Open. Comm. at 23-28 (May 18, 2001). The problem with Type II errors is that poor performance to a CLEC is essentially ignored. To the contrary, Verizon asserts that a Type II error has "no adverse outcome to the CLEC or its customers." *Id.* at 26. To explain its views, Verizon presents a baseball strike zone as an analogy to ILEC OSS performance to ILEC and CLEC customers. n45 In this analogy, a pitching machine represents ILEC OSS, and batters represent ILEC and CLEC customers. The better pitches, or "strikes," represent the better OSS performance, whereas the pitches outside the "strike zone" represent the poorer OSS performance. Since this analogy is supposed to illustrate parity performance

results, the only relevant issue here is the comparison between the accuracy of "pitches" to CLEC customers versus the accuracy of "pitches" to ILEC customers. Performance is considered failing when CLEC customers' "pitches" are further from the center of the "plate" than are ILEC customers' "pitches." The illustration analogy for performance result sample sizes is the number of "pitches." Verizon does not adequately describe any OSS performance analogy for the differences in the size of the strike zone (Verizon Open. Comm. at 28), and we find no relevance in this proceeding for this element of their analogy.

----------Footnotes----------

n45 Verizon's illustrations are reproduced here in Appendix D.

----------End Footnotes----------

We find that Verizon's analogy fails to support its conclusions regarding the impact of Type II errors. For example, on page 27 of its comments, Verizon asserts that it presents an illustration of a Type II error. However, in its "strike zone" analogy, Verizon asserts that when a CLEC receives two "perfect strikes" and the statistical test passes, a classic Type II error results. This analogy is inadequate. When actual sub-measure performance to CLEC customers is better than performance to ILEC customers as in this illustration, one-tailed statistical tests cannot fail. A one-tailed test can only find *worse* performance to be statistically significant. n46 Thus at the level of performance to an *individual* CLEC, the basic premise of a Type II error, that *worse* performance not be identified as a failure, is not illustrated in Verizon's page 27 example. Verizon's analogy does not account for the potential of discrimination at the individual CLEC level.

----------Footnotes----------

n46 We use the word "worse" with its common meaning, e.g., longer phone service installation times. We distinguish "worse" from "statistically significantly worse." The later occurs when CLEC customers' longer phone service installation times are identified as a performance failure by a statistical test.

----------End Footnotes----------

The negative effect of a "classic" Type II error on a CLEC is best illustrated in Verizon's comments at pages 26 and 25. In the page 26 illustration, the CLEC receives worse service, but the test criteria are not met. Verizon agrees this may be a Type II error. Verizon Open. Comm. at 25-26. Additionally, even though Verizon presents the results in the illustration on page 25 to be an instance where a failure is statistically identified, because of the small sample the illustration is more likely to represent an instance where there is insufficient test power to identify this result as a failure. Thus, for this CLEC, it also could be a Type II error. n47 The CLEC's customers would be disadvantaged and there would be no incentive payment to motivate the ILEC to provide better service. Pacific acknowledges the potential Type II error harm to CLEC customers by recognizing that even when CLEC customers notice they are getting worse service, the results may not fail the parity test. Pacific Open. Comm. DD at 6. In summary, for the above reasons we are not persuaded by Verizon's argument that "the consequences of a Type II error result in no adverse outcome to the CLEC or its customers." Verizon Open. Comm. at 26.

----------Footnotes----------

n47 While the setting of the "pitching machine" is an important premise in Verizon's analogy, one only can see the results and can never know the "setting" of the "machine." With Verizon's premise that the pitching machine is fairly set, their analogy may or may not be a Type I error depending on the power of the test. With low power, the results will not be identified as failing and no Type I error will be made. Our point here is that for any given result, one cannot know the "setting," and that these results are more likely to have been produced by a unfair "setting," and yet not fail the statistical test even though the actual pitches are "worse."

----------End Footnotes----------

We are concerned that the mitigation proposals reduce the number of Type I errors at the cost of producing more Type II errors. In every instance where an identified failure is "forgiven," performance to a CLEC's customers is worse

than performance to the ILEC's customers. While at a theoretical level, some of these identifications may be Type I errors, we cannot ignore the fact that the inferior performance disadvantages the CLEC. Given this disadvantage, especially under overall non-parity conditions, an increment in the Type II error rate is likely.

2. Statistical Test Assumptions

Evidence from the distribution of p-values was the most controversial issue regarding OSS performance assessment. Most importantly, Pacific pointed out the fallacy of the assumption that under parity conditions the expected average Type I error incidence would equal the critical alpha level. Pacific stated that for this equality to occur, three conditions must be met:

"If we were to assume that:

1) all sub-measures operate exactly at parity,

2) all the assumptions of the statistical tests are satisfied, and

3) all the sample sizes are large,

then we should observe that 1% of sub-measures have p-values of .01, and so forth. But none of these assumptions is completely satisfied. It is very unlikely that all the sub-measures operate exactly at parity, nor is it likely that the statistical tests we want to use are completely appropriate to the problem, and it is certainly not true that all sample sizes are large. Therefore, it should not come as a surprise that the percentage of p-values less than .01 is not 1%." Pacific Reply Comm. OSS Results at 5-6 (July 6, 2001).

The evidence before us indicates that for the purposes of justifying current mitigation proposals, none of these assumptions are sufficiently satisfied. The tests we have selected, and the application of those tests, were based on the need for a practical application to existing conditions. For example, we cannot dictate sample sizes for any test as could be done in an academic application. Sample sizes are determined by many operational, business, and regulatory factors. Consequently, we must test using samples smaller than are optimal for the statistical tests. Another example is the use of statistical tests for average-based performance measures. While the log transformation required by the *Interim Decision* may bring the performance data distributions closer to normality and thus improve the t-test application, normality was not completely achieved.

Pacific and ORA both questioned staff's conclusions regarding the high incidence of p-values close to "1.0." Pacific Reply Comm. OSS Results at 8; ORA Open. Comm OSS Results at 5-8 (June 29, 2001). In its report, staff concluded that the dramatic departure from the expected proportions indicated that Pacific was often providing CLEC customers service so superior that performance results for these services were not subject to statistical failure identification. If this were the case, then it would increase the number of high p-values and reduce the number of expected low p-values. In the spirit of ongoing technical development stated in the report, n48 the staff investigated this issue further. Upon request of staff, Pacific earlier had simulated parity OSS performance using the Interim Decision statistical model, Pacific's performance, and Pacific and CLEC sample sizes from December 2000. The premise of the investigation was that the simulation would forecast the possible outcomes if future performance were to improve or worsen. However, the simulations may also illustrate the effects of the departure from the optimal conditions needed to rely on the alpha/p-value distribution relationship, as illustrated below. Figure 3 shows three relationships. First, it shows the theoretical straight-line relationship between selected alpha levels and p-value cumulative percentages. Pacific's and Verizon's mitigation plans are based on this theoretical relationship. Second, the line depicting actual OSS performance begins above the theoretical line but continues mostly below that line. n49 Third, the line depicting simulated parity performance begins and stays below the theoretical line.

----------Footnotes----------

n48 *See* Init. Rept. on OSS Perf. at 2.

n49 This graph was updated from the draft decision to incorporate the changes made for the final performance incentives plan herein.

----------End Footnotes----------

[See Figure 3 in Original]

Several conclusions can be drawn from this graph. First, the considerable discrepancy between the parity simulation distribution and the theoretical distribution shows the effects of the departure from optimal statistical conditions. This provides evidence that we cannot simply "forgive" a percentage of failures equal to, or greater than, the critical alpha level. For example, at a 0.10 critical alpha level, using the *Interim Opinion* tests and actual performance parameters, the graph shows that we should only expect about five percent failure identifications overall. Second, to the extent that the simulations are accurate, the *similarity* between the simulation and actual performance distributions shows that much of the high incidence of "better service" results is actually an artifact of the statistical test applications. All of the departure from the theoretical cumulative distribution cannot be attributed to "better service" as suggested in staff's June 15, 2001 report. Init. Rept. OSS Perf. at 9. Additionally, the *differences* between the simulation and the actual performance distributions represents poorer *and* better than parity service at the left and right portions of the graph, respectively.

Although we have evidence that statistical test artifacts cause much of the departure from the theoretical optimal cumulative p-value distribution, we are not persuaded by some parties' comments that the provision of exceptionally good service does not affect mitigation appropriateness. Specifically, Pacific asserts that to not forgive 10 percent of the statistically identified failures because an ILEC otherwise provided "ultra-good service" would be "perverse." Pacific Reply Comm. OSS Results at 2-4. Pacific argues that "the notion that exemplary performance should decrease the allowance for random variation is unfounded, unfair, and counter to the principles of a fair incentive plan." n50

----------Footnotes----------

n50 Ex Parte contact on July 25, 2001, by Ed Kolto, General Attorney, and Eric Batongbacal, Executive Director-Regulatory, Pacific Bell Telephone Company, with Lester Wong, Advisor to Commissioner Bilas. http://www.cpuc.ca.gov/published/proceedings/I9710017.htm.

----------End Footnotes----------

We disagree with Pacific's assertions and arguments here for two fundamental reasons. First, the purpose of this incentive plan is not to reward or credit an ILEC for giving an OSS competitive advantage to the CLECs. The limited purpose is to ensure that an ILEC does not present OSS barriers to the CLECs. The role of an incentive plan is to ensure an ILEC removes all OSS barriers, regardless of whether an ILEC chooses to otherwise provide exceptionally better service. To allow provision of exceptionally better service to offset instances of poor service would be contrary to our goals here. n51 Additionally, it would set up rewards for gaming behavior. For example, an ILEC could give exceptionally good service for all but the most profitable ten percent of the sub-measures, and provide real OSS barriers for the remaining ten percent. With a ten percent mitigation plan, there would be no payments even for such purposeful anti-competitive behavior. In fact, a ten percent mitigation plan could function as an incentive for gaming behavior.

----------Footnotes----------

n51 The FCC appears to share this position. *See* FCC BANY Order, P 440, fn. 1350 and App. B. P 18, fn. 51.

----------End Footnotes----------

We also do not accept Pacific's reasoning when it asserts that ten-percent forgiveness is warranted in two scenarios: (1) a "perfect parity" scenario with ten percent "ultra-superior service," eighty percent "parity service" and ten percent "missed" due to random variation, and (2) a scenario with ninety percent "ultra superior" service and ten percent identified as "missed." Pacific Reply Comm. OSS Results at 3. Pacific's illustration is reproduced in Figure 4.

FIGURE 4

	Level of Service		
Scenario 1	Ultra-Superior	Parity	Missed
Scenario 2	Ultra-Superior		Missed

First, we find Pacific's arguments irrelevant because they assume optimal statistical test conditions that do not exist in the actual plan application as described earlier in our discussion. Second, Pacific's implication that the ten percent identified as "missed" should be forgiven in both scenarios neglects the premise of mitigation. By definition, the sole purpose of random variation mitigation provisions is to mitigate any payment liabilities from failures identified solely because of random variation. Even if we assume the necessary statistical conditions exist in these scenarios, and that the ten percent should be forgiven in Scenario 1, the logic does not extend to Scenario 2. Scenario 2 is based on the premise that ninety percent of the service is "so good that random variation has been eliminated as a potential cause for missing a sub-measure." *Id.* at 2, fn. 3. Thus, while 100 percent of the measures in Scenario 1 are subject to random variation, n52 only ten percent of the Scenario 2 measures are subject to random variation. Given the assumptions in these scenarios and adhering to the underlying principle that ten percent of the measures subject to random variation should be "forgiven," we should forgive ten percent in Scenario 1 and one percent (ten percent *of ten percent*) or less in Scenario 2. n53 In other words, zero percent of the OSS service in Scenario 1 is discriminatory, whereas at least nine percent is discriminatory in Scenario 2. We would expect the hypothetical ILEC to make incentive payments on nearly all the missed measures in Scenario 2. In conclusion, we find that the preponderance of evidence indicates that a mitigation provision that "forgives" a percentage of statistically identified failures equal to or greater than the critical alpha level is not appropriate under current circumstances.

----------Footnotes----------

n52 Under optimal statistical test conditions and "perfect parity service," statistical test results for all service are subject to random variation. Pacific's use of the term "ultra-superior service" seems misplaced for Scenario 1, as the term excludes random variation from the upper ten percent and contradicts the notion of "perfect parity service."

n53 If 100 percent of the results that are not ultra-superior service fail, outcomes of less than ten percent (one percent of total) Type I errors are likely. Ten percent Type I errors is likely under parity conditions for the portion of results that are not ultra-superior service. However, when 100 percent of these results fail, it is more likely that there are fewer Type I errors, if any.

----------End Footnotes----------

An apparent alternative would be to compare the actual performance distribution to the simulation distribution. However, there are several problems with this alternative. First, different statistical tests will produce different distributions. We would need to consider additional research determining the expected distribution for each different statistical application and then compare the relevant actual performance to each distribution. That research is not sufficiently developed at this time. Second, the discrepancy between the simulated cumulative distribution and the actual cumulative distribution changes with different critical alpha levels. For example, there are approximate discrepancies of 3.8, 3.5, 1.8, 0.1, and -1.4 percent at the 0.01, 0.05, 0.10, and 0.15, and 0.20 critical alphas, respectively. Since we based our selection of the 0.10 critical alpha level on other factors, using this critical alpha as a forgiveness metric would make the mitigation plan outcomes somewhat arbitrary. The mitigation outcomes also become somewhat counterintuitive to the extent that as we select a larger critical alpha to detect more failures, we decrease the number of failures treated by the plan. For example, at an alpha level of 0.01 we would identify 3.8 percent of the results for incentive payments, whereas if we increased the alpha level to 0.20, we would not identify any failures for incentive payments. Third, the integrity of using the comparison is completely dependent on the accuracy of the simulations. We do not have sufficient evidence of accuracy to depend on these simulations for appropriate mitigation levels. For these reasons we decline to use the simulations as a parity standard for forgiveness or mitigation purposes under conditions likely to be at non-parity. n54

----------Footnotes----------

n54 These simulations were created for different purposes. They were created to provide information on how the different plans would function under potential future parity and non-parity conditions. One particular problem Pacific had was in simulating parity outcomes for the average-based performance measures. As a practical matter, Pacific had to assume lognormal distributions, which would normalize with a lognormal transformation. However, we have previously documented evidence showing that while average-based distributions moved towards normality with the

transformation, they did not end up truly normal. *Interim Decision*, App. J, Attach. 4. As a consequence, the simulation does not depict a distribution sufficiently accurate for selecting the relatively small percentage margins that are needed for the mitigation plans.

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The ILECs' most compelling argument for their mitigation proposals is that without them, when their OSS processes are operating at parity they will be inappropriately penalized. While we agree with the need for some additional protection when parity performance has been achieved, we note that parity has not yet been achieved. We assume that under all the scrutiny that Pacific has experienced since July of 1999, when the performance measures were implemented, that Pacific has been trying to get its OSS processes to operate at parity. Given that they have not been able to do so in over twenty-nine months makes us doubt that parity will be achieved in the next few months. Since the implementation we order today will in effect be a six-month initial implementation period, it is not likely that Pacific will be placed in the unfortunate situation of parity operation without sufficient random variation mitigation during this time.

In its comments to the draft decision, Pacific objects to our assessment that its OSS performance is not in parity. To support their claim, Pacific provides overall success/fail percentages and asserts the theory that any failure percentage below the selected critical alpha level is evidence for parity or better. As discussed *infra*, we disagree. We also find that Pacific's reference to the FCC's statements is not relevant to its arguments. In Pacific's reference, the FCC discussed individual performance measures, not an overall success/fail rate. Additionally, examining repeated-failure rates, Pacific's own data and theory refutes their claim. Net critical alphas (0.008 -- chronic, 0.0016 -- extended, and 0.008 -- Tier II) and simulated parity failure rates (0.0032 -- chronic, 0.0005 -- extended, and 0.0077 -- Tier II) are exceeded by the current actual failure rates (0.017 -- chronic, 0.0108 -- extended, and 0.042 -- Tier II). App G at 1, examples A and B. n55

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n55 Our assessment of Pacific's overall performance regarding its readiness for 271 approval necessarily will differ from our assessment here. For example, if a performance measure fails because it is measuring different processes for ILEC and CLEC customers, a self-executing plan must still show a failure because the plan must depend on the performance measurements. See Init. Rept. on OSS Perf., June 15, 2001. App. A at 9-11, and App. B at 2, 5. However, a more thorough review such as described by the FCC in Pacific's reference could reveal the anomaly and conclude that there is no discrimination. Such a case would not detract from Pacific's 271 application, but would be considered an "out-of-parity" instance in the self-executing performance incentives plan until the performance measure was corrected.

- - - - - - - - - - - - - - - - -End Footnotes- - - - - - - - - - - - - - - - -

For all the above reasons, we decline to adopt a "forgiveness" mitigation proposal at this time. However, we will direct parties to continue mitigation provision development for our consideration for future use. Parties should address all the issues raised above as they develop and present new proposals. If at any time in the future there is compelling evidence that complete parity has been achieved, or that a suitable forgiveness metric has been developed, then we intend to include appropriate forgiveness if it presents no problems should performance deteriorate, or "backslide."

Additionally, we note that Pacific will not be without mitigation of an overall Type I error under our plan. Our curvilinear payment structure mitigates Type I error, as it reduces payment rates for lower failure rates. For example, in the performance simulation where four percent of the sub-measures fail, our payment structure only requires payment of about one-tenth of one-percent of Pacific's liability at risk, the payment cap. App. G at 1, example A. Whereas forgiveness provisions make absolute judgments about Type I and II errors (payment versus no payment), our payment structure provides Type I mitigation more consistent with the probabilistic nature of statistical test information by decreasing payment rates for lower failure rates. This mitigation treatment is consistent with a method originally proposed prior to the March 2000 workshops, as payment rates are adjusted to begin low and increase as confidence in the statistical results increase. *Assigned Commissioner's Ruling on Performance Incentives*, November 22, 1999 at 26. n56 However, to address the concern that Pacific may make incentive payments even when providing parity performance, we will explore this issue further in the section discussing payment amounts, *infra.*

----------Footnotes----------

n56 See also CLEC Reply Comm. DD at 2 and Attachment at 1 - 3.

----------End Footnotes----------

C. Conditional 0.20 Critical Alpha

In the *Interim Opinion* we directed parties to propose conditions where a larger alpha, 0.20, would be used to increase the power of the statistical tests. We will not adopt any party's specific proposal. We will not adopt Pacific's proposal because it is only used for the larger sample sizes (aggregate samples, greater than 30), and is used in repeated failure situations where the net resulting critical alpha is 0.008, much *smaller* than the unconditional standard, 0.10. To increase test power as we intended, a larger alpha is best used for the smaller, rather than larger samples. Additionally, since a consecutive-failure identification requirement decreases Type I error at the expense of Type II error and, as used by Pacific, is contrary to the more balanced situation we seek, we decline to use the Pacific proposal. The Verizon proposal is virtually the same and we decline to use it for the same reasons. However, we do appreciate the fact that both Pacific and Verizon have increased the critical alpha for the individual tests that make up the consecutive-failure identifications. Without the increase to the monthly 0.20 alpha level, the net critical alpha would have been one-eighth as large, 0.001 versus 0.008.

The CLEC proposal is consistent with the guidelines we established in the *Interim Opinion*. The CLECs would apply the 0.20 critical alpha only for small sample conditions, and as a consequence would increase test power where it is most often needed. However, we also wish to utilize other available information that will enhance the benefit of using a larger critical alpha by more closely targeting situations where it will be most helpful. Such information exists in the aggregate analyses. These analyses have larger sample sizes and thus are better at detecting non-parity (true failures) without increasing Type I error. Since increased test power and decreased Type II error are only helpful in true non-parity situations, n57 any information indicating non-parity will be helpful in targeting our conditional alpha. So if we use the larger critical alpha for CLEC-level results only where the corresponding industry aggregate fails, we are likely to better target the appropriate situation for increasing test power.

----------Footnotes----------

n57 See the discussion in the *Interim Opinion*, specifically Figure 4 at 66, and generally at 59-69 and 83-98 (January 18, 2001).

----------End Footnotes----------

We conclude that since increased power is most appropriate for small samples, for tests for repeated failures, and when there is information indicating sub-measure non-parity, that we will adopt the following provision: A 0.20 alpha will be used under the following circumstances: n58

(1) When sample sizes are less than 30 for single-month individual CLEC tests where the aggregate sub-measure test indicates non-parity.

(2) For all tests for repeated failures.

----------Footnotes----------

n58 The default critical alpha level is 0.10 as specified in D.01-01-037.

----------End Footnotes----------

We also find merit in the CLECs' proposal to decrease Type I error where it is most likely to occur, namely large samples. However, the CLECs propose applying the Smaller alpha level to all Tier II (aggregate level) statistical tests, regardless of actual sample size. Since there are still many small samples at the aggregate level, we find the proposal does not target the problem as closely as we would prefer. Given that a smaller critical alpha is most warranted for

larger samples, and for samples where information suggests parity, we will adopt a five percent critical alpha under the following conditions:

(1) When sample sizes are 100 or greater for single-month individual CLEC tests where the aggregate sub-measure test indicates parity.

(2) When single-month sample sizes are 500 or greater.

In their comments regarding the draft decision, both Pacific and Verizon assert that we are incorrect in the importance we give to Type II errors and the adjustments we make or fail to make. Pacific Open. Comm. DD at 8 - 9; Verizon Open Comm. DD at 11 - 15. We are not persuaded. First, we use a 0.10 critical alpha for most applications. In the *Interim Decision*, we showed that even when we limit ourselves to detecting performance *twice* as bad for a CLEC as for an ILEC, a 0.10 critical alpha would result in all tests providing a limit of ten percent Type I errors, but would result in only sixteen percent of the tests providing a limit of ten percent Type II errors. n59 Additionally, we utilize a 0.05 critical alpha for larger samples. Repeated measures have net critical alphas of 0.008 and 0.0016, respectively, with much higher Type II error rates, as discussed *infra*. The only time a 0.20 critical alpha is used for payment decisions is for individual CLEC performance assessment where the likelihood of a Type II error is even higher than usual because the aggregate fails and because sample sizes are small.

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n59 The average Type II error rate when using a 0.10 critical alpha in this case is five times the Type I error rate, and the median Type II error rate is over six times the Type I rate. *Interim Decision*; App F. at 2, App F., Attachment 1.

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D. Payment Amounts

Parties have presented economic justifications for the incentive payment amounts their respective plans would produce. Each justification makes several assumptions about economic harm to the CLECs. However, since variation in these assumptions and the potential affect of unrecognized variables could cause large changes in the economic estimates, we are reluctant to base the payment amounts on these estimates. For example, Pacific assumes that poor performance to CLEC customers would cause the CLEC to lose ten percent of those customers. Pacific's estimates are based on the net income that a CLEC would lose from each customer. We are concerned that higher percentages of customers could be lost, and in the span of time it would take for Pacific to correct the performance, a CLEC could lose so many customers that it would not be able to stay in business. The economic harm would far outweigh the individual customer profit amounts. For example, Pacific estimates that with a thirty percent failure rate, the economic harm to the CLECs would only be measured in the profit loss from ten percent of the CLEC customers leaving the CLEC, and estimates that loss to be $ 219,080. Pacific Open. Comm. at 8, 11. We are not persuaded that the assumptions in this estimate are sufficiently developed for us to decide that such poor performance could be affected by such a tiny portion of Pacific's local service net return. This amount represents about four-hundredths of one percent of the payment cap. n60 Additionally, the incentive payment Pacific offers in severe non-parity conditions pales in comparison to the failure rate and the net return. Pacific offers a $ 7 million monthly payment for a thirty-eight percent performance failure rate. Such a failure rate is likely to severely impact competition, yet the payment represents only about six percent of Pacific's local service net return. n61

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n60 $ 291,080/$ 550,059,120 = 0.000398, or less than 0.04%.

n61 ($ 7,415,506 x 12)/$ 1,527,942,000 = 0.0582, or less than 6%.

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Parties have proposed specific payment amounts that are justified by different assumptions and calculations. These payment amounts vary widely between the plans, and for us to determine which plan has the most appropriate payment

amount would require examination and verification of these assumptions and any unstated variables as discussed above. Given the need to move Pacific's 271 Section application process forward, we are not in a position to thoroughly uncover and examine all these issues at this time. However, Section 271 approvals in other states provide some guidance. There is a growing consensus that the overall cap for state performance incentives plans should be thirty-six percent of net return from local exchange service. We will adopt this amount for Pacific's incentive plan as discussed above. Yet for this cap to be a functional cap instead of just a hypothetical figure, there must be a way for this amount to be generated. In the extreme, we believe no party would object to the total cap being paid when an ILEC fails 100% of the performance measurements. This provides us with an anchor on which to base payment amounts for less deficient performance. For example, if we chose a linear method, ten percent of the cap would be paid for ten percent deficient performance. We find that this scaling method is consistent with the FCC's view of incentive payment amounts:

It is important to assess whether liability under an enforcement mechanism such as the APAP would actually accrue at meaningful and significant levels when performance standards are missed. Indeed, an overall liability amount would be meaningless if there is no likelihood that payments would approach this amount, even in instances of widespread performance failure. FCC *BANY Order* at P 437.

However, for several reasons we favor Pacific's proposed curvilinear relationship between payment amounts and performance. The meaning of smaller percentages of deficient performance is ambiguous relative to larger percentages. As discussed above, considerable analysis must be performed to understand the actual impact of 10 percent missed performance measures, whereas with levels of 20 percent, 30 percent, and 40 percent missed measures it becomes increasingly clear that parity is not being provided. Additionally, we suspect that after additional evidence is provided and analyzed, that some mitigation may be warranted. For these reasons we will adopt Pacific's curvilinear escalating payment concept.

However, using the payment cap as our guide, we find that Pacific's proposed payment amounts are insufficient. First, we believe that the payment cap should be reached well before 100 percent of the aggregate-level measures are being missed. While it is difficult to establish an exact missed performance percentage, we find it reasonable to conclude that when there are two missed sub-measures for every one that passes, the full cap should be paid. Given the low power of many tests, at this level of performance it is highly likely that the true percentage of misses would be closer to 100 percent. Therefore, we will anchor the payment levels on the principles that 100 percent of the cap should be paid when sixty-seven percent of the performance measures are missed, and that payments should increase in a curvilinear fashion.

Nevertheless, to adapt this "anchor" to Pacific's treatment of ordinary failure pervasiveness, we recognize that tests at the individual CLEC level will not show as high a failure rate as the industry aggregate level. Examining data from October through December 2000, we find that the aggregate level statistical failure rate is approximately 50 percent higher than the CLEC-level rate. n62 This relative percentage is corroborated by more recent data when benchmarks are also included. n63 For the above reasons, and recognizing the variability in the relative percentages, we find a reasonable "anchor" for basing the full monthly cap payment on single-month CLEC-level failure rates to be 50 percent.

----------Footnotes----------

n62 These relative rates are illustrated in staff's June 15, 2001 report. Figures C and E illustrate aggregate and CLEC-level failure percentage of approximately 15 and 10 percent, respectively. Init. Rept. on OSS Perf. at 16 and 18. These differences are due to the greater statistical power for tests for the larger samples (aggregate samples).

n63 March, April, and May 2001 overall aggregate failure rates are 75, 81, and 39 percent higher than the respective CLEC-level rates for these months. March aggregate and CLEC-level failure rates are 12.9 and 7.4 percent, respectively. April aggregate and CLEC-level failure rates are 11.4 and 6.3 percent, respectively. May aggregate and CLEC-level failure rates are 8.9 and 6.4 percent, respectively. These figures are taken from performance reports requested by staff from Pacific.

----------End Footnotes----------

We also acknowledge and address the ambiguity inherent in the performance measures, benchmarks, and statistical tests by requiring lower relative penalty amounts for lower failure rates and by increasing the penalty rates as performance worsens. While our payment levels are lower than those proposed by some parties, they are higher than

Pacific's proposals to better coincide with the full "liability at risk," to better account for the potential damage to competition, and to better motivate parity performance. In conclusion, we are persuaded that Pacific's increasingly higher penalty rates (curvilinear) are more appropriate for an incentive plan than the CLECs' more uniformly increasing rates (linear).

Figure 5 illustrates the guide we will use for payment amounts: n64

[See Figure 5 Guide for Relationship Between Percentage of Failures and Percent of Cap Payments in Original]

----------Footnotes----------

n64 The mathematical basis for this graph is presented in Appendix E.

----------End Footnotes----------

The penalty rates are anchored at a zero to one percent (of cap) payment for zero to five percent failure rates, to a 100 percent cap payment for a 50 percent failure rate, with interim rates starting low and increasing. n65 Specifically, our guide will be the following payment rates:

TABLE 1

Failure rate		Payment rate
Equal to or greater than	But less than	
0	5	Linearly increasing from zero to one percent
5	10	Linearly increasing from one to four percent
10	15	Linearly increasing from four to nine percent
15	20	Linearly increasing from nine to sixteen percent
20	50	Linearly increasing from sixteen to 100 percent
50	100	100 percent

----------Footnotes----------

n65 Only single-month failure rates are used. Additionally, the draft decision proposed zero payment for failure rates of less than one percent. However, data analysis performed by staff, as discussed *infra*, determined that this provision produced results no different than using the actual percentage rate for this interval. Consequently, to keep the plan and resultant programming as simple as possible, we have removed this feature.

----------End Footnotes----------

It may not be possible for us to exactly match this rate schedule because the total monthly payment amounts are generated from multiple individual origins. However, to the extent possible, the plan we adopt today will be based on this rate structure. Examples of rates we will use as a guide are included as Appendix F. This table is based on the principles proposed in Pacific's plan. As deficient performance becomes more pervasive, the payment amounts increase.

In contrast to Pacific's payment amounts, the amounts we adopt increase continuously based on the percentage failure rate. Specifically, the payment for each single-month individual CLEC performance failure will be a *base amount* multiplied by the overall single-month CLEC-level failure rate. n66 For example, with an overall single-month CLEC-level failure rate of eight percent, and a base amount of $ 40, the basic payment would be $ 320. The payments for chronic, extended, and Tier II chronic failures are 5, 10, and 25 times the basic payment. Examples of payments for different failure rates are presented in Appendix G. Compared to Pacific's proposal, the payment amounts we adopt for single-month sub-measure failures begin lower for the smallest percentages, but generally are the same as Pacific's proposed amounts. The amounts we adopt continuously increase, in contrast to Pacific's proposed amounts, which increase in four steps. Estimates of different total payment amounts generated by these individual payment amounts are presented in Appendix G. These amounts follow the curvilinear trend that we seek, except at the very worst performance levels. Since Pacific's performance is likely to remain at levels where our plan accurately follows the

curvilinear target and is unlikely to deteriorate to levels where the plan misses the target, we will adopt these plan payment levels. Even in the unlikely event that Pacific's performance was to deteriorate to the worst levels represented in this guide, the payment amounts are still reasonable as they are sufficiently close to the target and correspond sufficiently to our payment rationale.

----------Footnotes----------

n66 While Pacific and Verizon will be subject to the same incentives plan model, they will have different *base amounts* to adjust for differences of scale between the two ILECs. The base amounts will be set so that the plan produces the same *relative* payment (percentage of net return) for similar performance levels. These amounts will also be adjusted to account for month-to-month variation in CLEC OSS activity to ensure that such volume changes do not increase or decrease payment rates even though performance rates are constant.

----------End Footnotes----------

Additionally, to reduce the likelihood that Pacific may make incentive payments even when providing parity performance, we can make a simple modification to the plan. We have simulated performance levels that can be expected under parity conditions. That simulation shows that without any additional adjustment, Pacific will still be paying about $ 60,000 per month, on the average. n67 We find it reasonable to reduce the payment amount when (1) Pacific's failure rates are no higher than the rates for each category in the parity simulation, n68 and (2) Pacific has no chronic or extended failures for those measures and sub-measures designated by the parties as sufficiently important to have no minimum sample size. n69 If these conditions are met, we will deduct $ 60,000 from the total incentive amounts. If the generated amounts exceed $ 60,000, then the remaining amounts shall be allocated for Tier II disbursement. While this provision will not affect payments when Pacific's performance is worse than the parity simulation, it will result in virtually no incentive payments being made when Pacific is at or very close to parity. We find that this added provision is a reasonable adjustment addressing the case where Pacific might achieve parity performance, and that it provides an additional incentive for Pacific to strive to achieve such performance.

----------Footnotes----------

n67 See App. G at 1, example A. After the issuance of the revised draft decision on February 21, 2002, Staff checked the parity simulation figures for reliability. Staff performed the calculations with a new random number seed. The average of the earlier and current calculations is presented in App. G, example A. Good reliability is evidenced by the small change in the results.

n68 For the criteria, we have selected the higher of the two values from the two simulations to allow for some variability.

n69 See *Interim Opinion*, App. H, Attach. 1. We would not want to reduce the payment amounts when Pacific has repeated failures on these critical measures and sub-measures.

----------End Footnotes----------

A cursory review of incentive plan outcomes in New York and Texas indicates that our plan is certainly in the same "ballpark." However, because of the many differences in the three plans it is not possible to directly compare failure rates and payment amounts at more than a "ballpark" level. The three state plans have different numbers of measures, different weightings for outcomes, and different ways to assess outcomes, among other differences that make direct comparisons difficult. For the sake of "ballpark" background information we present a table of failure rates and actual or estimated payment amounts for the New York and Texas state plans in Appendix H.

E. Repeated Failures

Pacific, the CLECs, and Verizon all propose that consecutive-month failures be identified for incentive payments. We agree that repeatedly deficient performance should be addressed. However, we share the concern that the FCC has voiced regarding local competition "gaming." "Gaming" refers to possible strategic behavior that either incurs or avoids payments that are not correlated to reasonable OSS performance effects. n70

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n70 For example, see the FCC's Local Competition First Report And Order for references to concern about "gaming" in other areas. *Implementation of the Local Competition Provisions of the Telecommunications Act of 1996, CC Docket No. 96-98, First Report and Order, 11 FCC Rcd 15499,* (1996) (Local Competition First Report and Order). PP 239, 884, 889, 1040, 1101, and Separate Statement of Commissioner Susan Ness at D2.

----------End Footnotes----------

An ILEC might be able to "game" the repeated-failure provisions. n71 Under the proposed repeated-failure treatments, if an ILEC had sufficient control over its OSS processes it could strategically avoid any repeated-failure payments by giving deficient service every other month or never for more than two consecutive months. If this occurs, it would likely be more of a problem for the "extended chronic" identifications, which require six-month consecutive deficient performance. For example, if the test passed in the sixth month, no identification could be made until six additional consecutive monthly tests failed.

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n71 We also recognize that a CLEC may also be able to "game" the performance incentives system. For example, a CLEC could hold its orders and submit them all at once at the end of the month. The OSS overload would cause the CLEC's orders to be more slowly processed than the ILEC's orders because the ILEC's orders would be spread across the rest of the month. This particular example may not be a real concern for several reasons. One reason is that such a strategy would be self-defeating for the CLEC. Submitting orders to solicit deficient service for its customers could cause the CLEC to lose too many customers. Additionally, we can include provisions to exclude such intentional "clustering" of orders from penalty payments. The forecasting requirements proposed by several parties may adequately address this issue. Pacific Plan at 20-21; CLEC Plan at 18-19.

----------End Footnotes----------

Another concern we have for the repeated-failure assessments is that they decrease Type I error at the expense of Type II error. For example, using a single-month test with a Type I error cutoff of 0.20 and a Type II error of 0.30, a failure identification decision based on three consecutive monthly failures would have a net result with a Type I error limit of 0.008 and a Type II error of 0.657. n72 Intuitively, the effect on Type I error is illustrated by the fact that to fail to identify good performance as good, there must be three misses in a row, and the resultant probability is lower. For example, when flipping a coin with "heads" representing a Type I error, getting a coin to come up "heads" three times in three tosses is far less likely than getting the coin to come up "heads" in just one toss. n73 On the other hand, the effect on Type II error is illustrated by the fact that to fail to identify bad performance as bad, there only needs to be at least one miss out of three, and the resultant probability is higher. For example, when flipping a coin with "heads" representing a Type II error, getting the coin to come up "heads" at least once in three tosses is far more likely than getting a coin to come up "heads" in just one toss. n74

----------Footnotes----------

n72 The resultant Type I error when all three out of three tests must fail individually at the 0.20 level to reach a performance failure decision: $p = 0.20^{<3>} = 0.008$; The resultant Type II error when three out of three tests with individual Type II errors of 0.30 must fail to reach a performance decision: $p = 1 - (1 - 0.30)^{<3>} = 0.657$.

n73 There are two possible outcomes for one coin toss: H ("heads") or T ("tails"). The probability of a "heads" is one out of two chances, expressed as one-half, 50 percent, or 0.50. There are eight possible outcomes for three coin tosses: TTT, TTH, THT, HTT, HHT, HTH, THH, and HHH. As there is only one three-headed outcome (HHH), the probability of three heads is one out of eight chances, expressed as one-eighth, 12.5 percent, or 0.125.

n74 Again, there are two possible outcomes for one coin toss: H ("heads") or T ("tails"), with the probability of a "heads" being one out of two chances, or 0.50. Again, there are eight possible outcomes for three coin tosses: TTT,

TTH, THT, HTT, HHT, HTH, THH, and HHH. However, since seven of these outcome have at least one "heads," the probability is seven out of eight chances, expressed as seven-eighths, 87.5 percent, or 0.875.

----------End Footnotes----------

As with the gaming possibility, the extended chronic failure test is the most susceptible to this increased Type II error problem. Even with relatively very high power such as a seventy percent chance to detect poor performance when it occurs (a Type II error of 0.30 for a single test), the net Type II error when six consecutive statistical test failures are required is 0.882. In other words, under non-parity conditions a Type II error is virtually assured.

Because of this imbalance between these two types of errors, we will implement two provisions designed to mitigate the discrepancy. First, for the extended chronic failures to be identified, we will only require five out of six consecutive tests to fail. n75 Second, to ensure that parity performance has been achieved subsequent to a repeated-failure identification, we will require two consecutive months to pass before sub-measure failure payments are returned to non-chronic or non-extended chronic payment levels. The CLECs proposed this provision for their chronic failure treatment (CLEC Plan at 9), and we agree that it is an appropriate provision to reduce the chances of gaming and to increase the chances of identifying and correcting poor performance when it occurs.

----------Footnotes----------

n75 Requiring five out of six months to fail at the 0.20 critical alpha level produces a net critical alpha of 0.0016 (Type I error), and assuming a single-month beta of 0.30, produces a net beta of 0.580 (Type II error). Staff determined these values using a binomial calculation.

----------End Footnotes----------

Pacific proposes that when there is no activity by a CLEC or CLEC aggregate n76 for a month during an otherwise consecutive "run" of performance failures, that the "run" not be considered a repeated failure. Pacific Repl. Comm. at 4-5 (June 1, 2001). The CLECs disagree, and Verizon's plan ignores such a month without activity. CLEC Open. Comm. at 9 (May 11, 2001); Verizon Assumptions documentation (May 16, 2001). n77 For example, Pacific would not consider the performance failures during the months of January through April except for inactivity in March, to constitute a repeated (chronic) failure, whereas the CLECs and Verizon would identify it as a repeated failure. We wish to avoid the situation where the only performance received by a CLEC or the CLEC industry on a particular submeasure is failing, yet payments stay at a one-month failure payment amount as if it were an isolated incident. Therefore, we will adopt the CLEC-Verizon position, except that a gap of inactivity of three months will interrupt the "run" unless the sub-measure is one that is identified as having no minimum sample size. n78

----------Footnotes----------

n76 When individual CLEC results do not meet sample size minimums, they are aggregated with other sub-minimum CLEC samples to create a CLEC small sample aggregate. D.01-01-037, App. C at 4.

n77 Two page document setting forth the assumptions used to code each plan for the simulation. Distributed by Verizon Communications by electronic mail to the active technical experts on the service list. Originally titled "VZASSUMPTIONS.doc."

n78 The payment for the current month will be the same as if the one or two months without activity did not exist. CLEC Open. Comm. DD, Attachment at 3. The current month would be assessed using the repeated measures critical alpha.

----------End Footnotes----------

F. Severity

Adjustments for the severity of performance failures can enhance an incentive plan's ability to target the most deficient performance by making incentive payments greater for the more severe failures. While Pacific's plan does not address severity, the CLECs', Verizon's, and ORA's plan include severity adjustments.

The CLECs' and ORA's plans indirectly address severity by using the probability statistic, Z or *t*, as a surrogate for severity n79. All other things being equal, as a performance failure becomes more severe, the corresponding Z-statistic becomes larger (smaller p-values). However, all things are not equal. For example, the Z-statistic is also influenced by sample size. This influence can easily overshadow actual performance differences to the point where a less severe performance result can have a larger Z-statistic than a much worse result if its sample size is sufficiently larger. Citing one actual sub-measure example, an ILEC took an average of nine days to provision service for its own retail customers, an average of 15 days for CLEC A's customers, and an average of 12 days for CLEC B's customers. With sample sizes of 9 and 118 cases for CLEC A and B, respectively, the statistical test produced a Z-statistic of 2.0 for CLEC A and 3.5 for CLEC B. n80 Even though performance was worse for CLEC A, CLEC B received a larger Z-statistic because of the larger sample size. This is simply because we can have greater confidence (higher Z-statistics, lower p-values) in results for larger samples. However, the CLEC and ORA severity proposals would identify CLEC B's less severe results as more severe than CLEC A's results even though this is not the case. Because of the possible confounding with other variables, such as sample size, we decline to adopt the severity adjustment proposals of either the CLECs or ORA.

----------Footnotes----------

n79 The following discussion also applies to *t* statistics.

n80 As listed in Pacific's performance reports using the *Interim Opinion* statistical model. The mean of the logs for each result was transformed back into days for the performance figures listed here. The non-transformed means were 20 days for CLEC A and 12 days for both CLEC B and Pacific.

----------End Footnotes----------

In contrast, Verizon's plan addresses severity by calculating how much worse performance is to CLEC customers than to Verizon's own customers. In general, Verizon's plan calculates the percentage of customers who receive service worse than the average ILEC customer (or the benchmark), and then uses that number as a measure of severity to adjust payment amounts. The severity measure is an integral part of Verizon's transaction-based incentive payment system, and we find it difficult to convert to the sub-measure-based approach we adopt. As a consequence, we decline to adopt Verizon's severity adjustments. However, we appreciate these development efforts and encourage Verizon to continue this development in the next phase of the incentive plan.

We encourage all parties to continue to develop severity measures for the incentive plan. Insofar as a severity adjustment might scale payments to the degree of harm and help ILECs focus on the most needed OSS enhancements, we are interested in adopting such adjustments in the future.

G. Statistical Testing for Benchmarks

Pacific proposes statistical testing for benchmarks and focuses its justification on reducing random variation effects on assessments with underlying compliant conditions. Pacific Open. Comm. at 19-21 (May 18, 2001). However, for us to fairly implement such a treatment, we would need to also examine the effect of random variation on assessments with underlying non-compliant conditions. We struck a balance between the two effect types, or error, in the *Interim Opinion*, and without additional study and justification we will not change that balance. *Interim Opinion* at 116-124. Consequently, we will not apply statistical testing to benchmark sub-measure results.

H. Functionality

An important distinction between the plans is their functionality in fundamental areas. A plan should be consistent across time and should reflect differences in performance. Since we will adopt one plan for both ILECs, we need to know that the plan we select will produce equitable outcomes for both ILECs. The plans should also produce payment amount levels that are consistent with the "curvilinear" payment amount guide we established above.

Pacific's plan provides relatively consistent output and is correlated to aggregate failure rates for the year 2000. The other plans' payment amounts are either not significantly correlated to aggregate failure rates and/or are inconsistent month-to-month. n81 Since Pacific's plan is not based on volume metrics, the payment amounts can be adjusted for Pacific and Verizon to account for the different size of the two companies and to match the "curvilinear" payment guide.

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n81 For Pacific's performance and payments, the correlations between payment amounts and failure rates are 0.42 for Pacific's plan, 0.13 for the CLECs' plan, -0.12 for Verizon's plan, and -0.01 for ORA's plan. Only Pacific's correlation is significant at the 0.10 level (N = 12). The graphs at the end of Appendix B illustrate the relationship between monthly payment amounts and failure rates.

----------End Footnotes----------

The CLEC plan payment amounts are much higher than our payment amount guide. The plan does not appear to be as sensitive to overall failure rates as the Pacific plan. Verizon's and ORA's plans are inconsistent from month-to-month, producing wide variations in payment amounts that are not related to the relatively small variations in aggregate failure rates. Other problems with severity and volume-related metrics make the Verizon, CLEC, and ORA plans difficult to implement consistent with the criteria we have discussed in this decision.

For the above reasons, we find that Pacific provides the best base plan. However, as discussed, we find that several significant modifications are necessary for the plan to be consistent with the criteria we deem important. We will adopt a plan generally based on Pacific's plan, but with several major modifications.

I. Measures

Not all performance measures will be subject to incentive payments. In the February 2001 workshops the parties referred to an existing agreement regarding excluded measures. At staff request, Verizon later submitted the list of performance measures and sub-measures to be excluded from the incentive payment plans. n82 That document is included in the record in this proceeding and is reproduced here as Appendix I. However, in their recent comments, Verizon proposes only a subset of these measures be used because other measures are correlated to the remaining set. Their rationale is that paying on a measure as well as a correlated measure results in duplicative payments. Verizon Plan at 4 (May 4, 2001). However, since the plan we adopt is scaled to Pacific's and Verizon's individual payment caps, their total payment amounts are no different than if fewer measures were used. Where there may be correlated measures, there is still value in multiple measurements, unless the measures have perfect or near-perfect correlations. n83 We have no evidence to suggest that these performance measures are so highly correlated that they add no value to the assessment. Additionally, these measures were established in a collaborative process and we do not wish to depart from the conclusions in that collaboration because of the wishes of one party. For the above reasons, we will use all performance measures except for those that the parties have agreed to exclude as listed in 2000 GTE Workpaper # 13.

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n82 The document states that Pacific, GTE, and the CLECs agreed to these exclusions. The document was resubmitted following the February 7, 8, and 9, 2001, workshops and was received in this proceeding as 2000 GTE Workpaper # 13 on April 2, 2000.

n83 *See* W. Hays, Statistics at 717-720 (5th ed. 1994), for a statistical explanation. See also E. Ghiselli, J. Campbell, and S. Zedeck, Measurement Theory for the Behavioral Sciences, at 162-168, 261 (1981).

----------End Footnotes----------

J. Remedy Exclusivity

Both Pacific and Verizon ask that payments made under the adopted incentives plan be the exclusive remedy for deficient performance. The CLECs oppose exclusivity, however, and point out that Pacific and the CLECs agreed in 1998 that performance incentives would not be the sole remedy. CLEC Open. Comm. at 36. n84

----------Footnotes----------

n84 The agreement reads: "The parties agree that monetary performance incentives are not the exclusive remedy available to address Pacific's service problems." Late Filed Joint Comments Regarding Report on Performance Incentives, filed October 5, 1998, by Pacific Bell and the CLECs, at 48. Verizon (then GTE California Incorporated) participated in some discussions that led to the joint motion. Id. at 1. However, Verizon did not participate in incentives

discussions, and was not a party to the motion itself. *Id.* at 1, fn. 1; Motion to Accept Joint Comments Regarding Report on Performance Incentives, filed October 5, 1998, Pacific Bell and the CLECs, at 1, fn. 1.

----------End Footnotes----------

Pacific now supports payment exclusivity asserting that performance related payments must be defined as liquidated damages or penalties, and that penalties are unenforceable under California law. Pacific Open. Comm. at 26. Pacific asserts that as a consequence, "performance-related contractual payments must be considered liquidated damages." *Id.*

Verizon also takes the position that payments should be the sole remedy and should be defined as liquidated damages. Verizon Reply Comm. at 29. Verizon argues that to define payments as penalties would require that penalties be paid only under the provisions of Pub. Util. Code § 2104, which would require Superior Court action. Verizon argues that as a consequence, payments defined as penalties could not be "self-executing" as intended in the plans. Verizon further argues that since a self-executing plan cannot impose monetary penalties, any payments must be a "reasonable estimate of fair compensation" and thus must be treated as liquidated damages as the sole remedy for failed OSS performance. Verizon fears that without this protection a CLEC will be able to automatically recover compensation for deficient OSS performance and then sue for further damage payments. Verizon Reply Comm. at 29-33.

The CLECs argue that neither the FCC nor the Commission in this proceeding has sought incentive payments as "fair compensation," and that payments should be treated as penalties. CLEC Open. Comm. at 36-40. The CLECs distinguish between the ILECs' asserted goals of "fair compensation" and the goal of the plan as an "incentive" mechanism. The CLECs' arguments imply that "fair compensation" for losses due to OSS disadvantages would not provide sufficient incentive for an ILEC to provide OSS parity. *Id.* As a consequence, the CLECs argue that incentive payments must be deemed "penalties" which are not the exclusive remedy for deficient OSS performance to their customers. *Id.* at 39.

We are not persuaded by Pacific's and Verizon's arguments that this Commission should declare the incentive payments to be the exclusive remedy for deficient performance. In fact, we note that in its *BANY Order* the FCC asserted that "it is not necessary that the state [enforcement] mechanisms alone provide full protection against potential anti-competitive behavior by the incumbent." n85 The FCC further acknowledged that the ILEC might be subject to "payment of liquidated damages through many of its individual interconnection agreements" and "risks liability through antitrust and other private causes of action if it performs in an unlawfully discriminatory manner." n86

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n85 *BANY Order at P 430, 15 FCC Rcd 4165.*

n86 *Id.*

----------End Footnotes----------

We likewise reject Verizon's insistence that Pub. Util. Code § 2104 compels us to decree the incentive payments to be liquidated damages and the CLECs' exclusive remedy for discriminatory ILEC performance. Given the level at which we set the payments or billing credits today, we consider them to be an inducement of appropriate market behavior rather than penalties. n87 This record does not support the determination that the incentive payments will be "fair compensation" to a harmed CLEC. What constitutes fair compensation to the CLECs would be extremely difficult to calculate. Moreover, the goal of the proceeding is not to provide "insurance" payments to a CLEC (that it will receive fair compensation while it is being discriminated against), but to ensure that there is a competitive market. Significantly, this Commission has the authority to award reparations, not damages. *See* Garcia v. PT&T Co. *3 CPUC2d 534 (1980).* In addition, we have crafted this plan in concert with the parties in order to implement the federally mandated restructuring of the local market.

----------Footnotes----------

n87 The Commission has previously used financial incentive mechanisms to encourage utility behavior. *See* In the *Matter of Used Household Goods Transportation by Truck 1998 Cal. PUC LEXIS 431;* In Application of Pacific Gas and Electric Company *12 CPUC2d 604 (1983);* and CPUC Resolution E-3657 (February 17, 2000).

----------End Footnotes----------

K. Implementation

The ILECs in particular will have a number of tasks to complete before the plan we adopt can be implemented. They must establish procedures for monitoring, assessment, reporting, and making payments. The CLECs and the ILECs must prepare for possible dispute resolution. Some of the performance assessment requirements may require modification in view of Pacific's experience with *Interim Opinion* implementation. To aid the parties in these implementation tasks, we establish specific requirements. Some of these requirements are in response to issues raised in the various briefs and in comments on the draft decision. Other issues may not have been formally presented, but must be addressed in order to expedite the implementation process.

1. Forecasting

Pacific and the CLECs have agreed that forecasts of OSS demand are important to smooth and efficient OSS operation, and that inadequate CLEC forecasts should be cause for excluding incentive payments in the event that deficient OSS performance resulted from such forecasts. CLEC Plan at 18-19; Pacific Plan at 20-21. ORA is concerned that Pacific may unilaterally define forecast inadequacy. ORA Open. Comm. at 7. However, the CLECs have agreed to provide forecasts as proposed by Pacific. CLEC Plan at 18-19; Pacific Plan at 20-21. As the CLECs and the ILECs are in the best position to know how to implement forecasts for the purposes of OSS operation, we adopt these provisions.

2. Monitoring and Reporting

The ILECs will monitor OSS performance continuously. In the performance measurements proceeding we have established the performance measures on which the incentive payments will be based as well as the performance measures that are used solely for diagnostic purposes. These measures undergo periodic review and updating. D.01-05-087 (May 24, 2001) (*JPSA Opinion*).

The *JPSA Opinion* also established performance-reporting requirements. Pacific is now required to report performance results by the twentieth calendar day of the month succeeding the reporting period. *JPSA Opinion* at 106. n88

----------Footnotes----------

n88 The *JPSA Opinion* contained several requirements that needed to be completed before the due date of the 15th of each month was shifted to the 20th. *Id.* Upon staff inquiry, Pacific personnel reported that those conditions were met and Pacific is currently reporting on the 20th of each month.

----------End Footnotes----------

3. Payments

Pacific proposes to make payments within thirty days of the due date of the performance results report. Pacific Plan at 16. For example, performance reports for August 2001 would be due on or before September 20, 2001. Payments arising from the August 2001 performance results would be due on or before October 19, 2001. No parties oppose Pacific's proposed payment schedule. As the schedule has no opposition, and seems to provide a reasonable amount of time to ensure accurate payment, we will adopt it as proposed.

4. Payment Recipients

Two goals will guide our selection of who receives the performance incentives plan payments or billing credits. First, the plan should provide some compensation to each CLEC when it receives poor performance as established by the performance criteria and payment structures we have established in this Decision and D.01-01-037. Second, since the payments or billing credits to the CLECs are not likely to create sufficient incentives for optimal OSS behavior, the overall industry-wide effect of OSS performance on competition should generate additional incentive payments. This

will be especially true while CLEC market share is low. With a small percentage of the market, compensation for poor performance necessarily based on that small percentage is not likely to provide much incentive to the ILECs. These payments could simply end up being seen as the "cost of doing business," and not be effective in motivating optimal OSS performance. Additional payments based on overall industry effects will provide an incentive for this potential problem.

To address the first goal, we will require that payments as billing credits go directly to each CLEC whose monthly sub-measure results the plan identifies as warranting payment for failing performance. These credits will be termed Tier I payments and include payments for individual CLEC results and for aggregate CLEC results where the only logical measure is at the industry level. n89 These credits will be adjustments to the rates that each CLEC pays to Pacific for OSS services and for local exchange wholesale services. Consequently, since a rate paid for these services can never be less than zero, each credit to each CLEC will be limited by the total amount that each CLEC pays to Pacific for OSS services and for local exchange for its customers. The surplus credit amounts are added to Tier II as discussed, *infra*.

----------Footnotes----------

n89 For example, Measure 42, Percent of Time Interface is Available, is only tracked at the CLEC industry-aggregate level since the interface either works and is open to all CLECs, or it does not work and is closed to all CLECs.

----------End Footnotes----------

The second goal, incentive payments based on overall industry effects, is achieved through incentive payments generated by industry-wide ILEC OSS performance. Individual CLEC results are aggregated into one performance result for each sub-measure. Payments are generated from each sub-measure with failing performance. These payments, as billing credits, will be termed Tier II payments. Recognizing that the total payment made by an ILEC is designed to be an incentive for good OSS performance, and thus will exceed the measure of CLEC economic harm, it is appropriate for these credits to go to the ratepayers as proposed by ORA. See *supra*. Additionally, any surplus Tier I credit amounts will be added to Tier II payment amounts in order to keep the scale of the total incentive payment proportional to Pacific's performance consistent with our target payment amounts.

ORA proposes that incentive payments go to ratepayers through Pacific's Rule 33 n90 and Verizon's Tariff 38 n91 surcharge and surcredit mechanisms. ORA's rationale is that incentive payments should go to ratepayers because the ratepayers paid for the infrastructure changes and upgrades that the ILECs made to effectuate local exchange competition. n92 ORA argues that since ratepayers are making a significant investment in the ILECs' OSS infrastructures, it follows that they should receive incentive payments, which are directly related to the extent that those infrastructures do not perform as they should. ORA argues that to the extent that OSS performance presents competition barriers, not only will ratepayers have borne the cost for the ILECs' OSS-related infrastructure, they also will not have received the economic and social benefits of competition which motivated the 1996 Telecommunications Act.

----------Footnotes----------

n90 Schedule Cal. P.U.C. No. A2.1.33 -- Billing Surcharges of Pacific's tariffs ("Rule 33").

n91 Schedule Cal. P.U.C. No. 38 -- Billing Surcharges of Verizon's tariffs ("Tariff 38").

n92 D.00-09-037 authorized Pacific to recover $ 87.5 million in claimed Local Competition Implementation Costs from California ratepayers. Similarly, D.01-09-063 authorized Verizon to recover $ 12 million in claimed costs.

----------End Footnotes----------

Under ORA's plan, incentive payments would be calculated on an annual basis and paid in monthly increments during the following year through the Rule 33 and Tariff 38 mechanisms. As authorized in D.00-09-037 and D.01-09-063, Rule 33 and Tariff 38 billing surcharges are used to compensate Pacific and Verizon for the costs they incurred to implement local competition. The Rule 33/Tariff 38 billing mechanisms would flow the incentive payments back to all ratepayers, including CLECs and inter-exchange carriers, in the same proportion as the local competition implementation infrastructure costs that each customer class (e.g. toll, access, and exchange) is paying through annual

surcharges. ORA points out that the Commission adopted "Service Quality Assurance Mechanisms" for both Citizens Telephone (D.95-11-024) and GTE California, Inc., (D.94-06-011) in which violations of the service standards resulted in surcredits to ratepayers, and that CPUC General Order 133 (GO-133) also provides for ratepayer surcredits in the event of poor service by a regulated telephone company.

Exogenous cost changes and other regulatory surcharges and surcredits are included in the annual Price Cap filings that Pacific and Verizon are required to make every October. In the annual filings, the utilities identify specific cost changes (increases and decreases) that occurred in the prior period (e.g., from October 1 through September 30). These cost changes are combined and summed to determine the dollar amount of surcredits or surcharges to be reflected on a customer's monthly bills during the next calendar year. Surcredits and surcharges, such as Pacific's merger savings and local competition implementation costs, are distributed between three groups of services in proportion to each group's share of Pacific's total annual billing base. These groups are IntraLATA Exchange, IntraLATA Toll Services, and IntraLATA Access Services. The new surcredit or surcharge percentages are applied to the tariffed rate of the individual services that comprise each of the three service groups (IntraLATA toll, access, and exchange). The adopted surcharge or surcredit percentage is applied to the tariffed rate for the services in each service group. This is the price that the customer pays for the respective service for the following year.

In D.00-09-037 and D.01-09-063 we used Rule 33 and Tariff 38 as the mechanisms for the payment of Pacific's and Verizon's local competition implementation infrastructure costs by their customers. Rule 33 and Tariff 38 surcharges/surcredits appear as separate line items on Pacific's and Verizon's bills respectively. n93 ORA argues that since the line items have already been established, there is no need for the Commission to authorize the creation of new line items, thus avoiding billing system modification expenses.

----------Footnotes----------

n93 For example, ORA points out that the Rule 33-related line item is located in the Taxes and Surcharges section on Pacific's bills as item 6 "rate surcharge."

----------End Footnotes----------

We are persuaded by ORA's arguments. Pub. Util. Code § 454 gives the Commission statutory authority to establish rates and charges for regulated telecommunications companies. Commission decisions provide precedents for service standard violations generating surcredits to ratepayers, as described by ORA, discussed *supra*. Additionally, paying into the General Fund does not provide the equitable outcome that payment to the ratepayers provides. Unlike the ratepayers, the General Fund has no investment in ILEC OSS infrastructures and is not directly affected by OSS outcomes. For the above reasons, for Tier II incentive payments, we will adopt ORA's basic proposal to make payments to the ratepayers.

However, using Rule 33/Tariff 38 mechanisms will delay payment disbursements to the ratepayers. For example, a payment incurred in January 2003 would not be reflected in the surcredits to be disbursed until 2004. In addition to the Rule 33/Tariff 38 mechanism delays, there are built-in delays for performance result and incentive payment calculations. Payments are not due until about seven weeks after the end of the month in which the performance occurred. n94 As a consequence, for example, performance incentive payments for August 2002 through July 2003 would be the most recent twelve-month's incentive payments available for the Price Cap filing in October 2003. The total Tier II incentive payment amounts for these twelve months would then be credited to the ratepayers in equal monthly increments from January 2004 through December 2004.

----------Footnotes----------

n94 For example, performance results for July are due August 20th, and incentive payments generated by those results are due 30 days later, September 19th. *Supra*.

----------End Footnotes----------

Given these delays, we are concerned that the performance incentives plan would not provide a timely incentive for an ILEC to provide good performance. To the extent possible, payments should immediately follow poor performance

when it is identified. However, we realize that there would be numerous logistical and efficiency problems in creating an entirely new structure to provide immediate payments to each individual ratepayer. To remedy the payment time-lag, we will adopt ORA's proposal with the modification that incentive payments be made monthly into a memorandum account. However, payment *disbursements* still would be delayed. Recognizing a basic economic principle, that a monetary amount received in the future has less value to the recipient as the same amount received in the present, we will require that the payment account accrue interest. A ratepayer should be "indifferent" to an amount received in the future versus an amount received now if the future amount were to be increased as if the ratepayer had spent or invested the money now. Additionally, ratepayers should be "indifferent" to future payments if they perceive equity when comparing the interest rates they receive to the interest rates they pay to Pacific and Verizon. Consequently, we will require the ILECs to make monthly payments into an interest-bearing memorandum account with an interest rate equal to the tariffed rate the respective ILEC's charge their customers for late payment. The interest shall be compounded monthly, and interest accrual shall begin immediately after the incentive payments are due and shall continue to accrue on all amounts not yet credited to the ratepayers.

It is not our intent to disadvantage ratepayers as a result of the ILECs paying into the performance incentive memorandum account. Therefore, we shall require that Pacific Bell identify in its separated intrastate results of operations monitoring reports n95 an adjustment clearly identifying the annual performance incentive payments. This adjustment shall remove from the California intrastate results of operations, and the earnings monitoring reports, the payments made to the memorandum account.

----------Footnotes----------

n95 The Pacific Bell intrastate separated earnings report is referred to as the Intrastate Earnings Monitoring Report (IEMR) and has the NRF monitoring report code PD-01-27. Verizon's report is entitled the Recorded and Adjusted Separated Results of Operations Report and has the NRF monitoring report code GD-04-01

----------End Footnotes----------

5. Root Cause Analysis and Expedited Dispute Resolution

Pacific proposes that it be allowed to "use Root Cause Analysis to demonstrate that an apparent out-of-parity condition was attributable to an atypical event beyond the reasonable control of Pacific Bell." Pacific Plan at 14. Pacific would have the burden of proof, and if it met that burden would be able to exclude the condition (performance result) from its incentive payments. *Id.* at 15. The CLECs concur with the root cause analysis Provisions Pacific proposes except for a concern about *force majeure* events. CLEC Open. Comm. at 35. The CLECs argue that *force majeure* should not allow Pacific to treat its customers preferentially, and request that parity measures still be eligible for incentive payments. For example, in the event of *force majeure* service outages, the CLECs believe that their customers should regain service at parity with Pacific's customers.

We agree that discrimination in restoring normal OSS services could damage competition. Following the September 2001 terrorist attacks, we believe customers have become especially sensitized to infrastructure recovery issues, and an ILEC could easily gain an advantageous reputation for superior recovery and robust service. However, in their comments to the draft decision, Pacific points out that outages usually occur in a particular limited location. If that location has a disproportionate number of CLEC customers, even though Pacific would restore services in a perfectly non-discriminate manner Pacific could fail the measure because their performance average would be based on a much larger area where resources were not taxed as much as in the troubled area. Pacific Open. Comm. DD at 22 - 24. For these reasons, we agree that *force majure* events should be included as excluded events for parity as well as benchmark measures. CLEC and customer protection will still be provided by the fact that Pacific will have the burden of showing that but for the event, performance would not have failed. In the example discussed here, it will be important to also examine the nature of the event, and we change the plan to reflect this fact.

In 1999, Pacific and the CLECs were apparently close to an agreement on expedited dispute resolution (EDR) provisions. However, upon passage of Senate Bill 960 the CLECs introduced adaptations that Pacific rejected. n96 Even though there were many points of agreement, an implementable EDR process is not currently available for the incentives plan. Numerous issues critical to an effective EDR process are either unresolved or unacknowledged. For instance, parties have not been able to agree on what, if any, procedural timelines and rights they are willing to waive in

the interest of expedited process. Moreover, it is not clear what resource impact a formal EDR process will have on this Commission.

----------Footnotes----------

n96 CLEC Open. Br. at 39 - 53 (March 22, 1999); Pacific Open. Br., at 26-39 (March 22, 1999); CLEC Reply. Br. at 26-42 (April 5, 1999); and Pacific Reply. Br. at 18-23 (April 5, 1999).

----------End Footnotes----------

Pacific's current position is:

Any dispute regarding whether a Pacific Bell performance failure is excused will be resolved, through negotiation, through a dispute resolution proceeding under applicable Commission rules or, if the Parties agree, through commercial arbitration with the American Arbitration Association. Pacific Plan at 15 (March 23, 2001).

However, there is nothing about what Pacific offers here that is "expedited." If the incentives plan we adopt did not have this paragraph, it would be no different than if it did. Given the need for further examination and discussion of these essential issues, we cannot order an EDR process at this time. We urge the parties to address these unresolved issues no later than at the conclusion of the initial implementation period. Until an EDR process is implemented, the ILECS must automatically make incentive payments as indicated by the incentive plan we adopt. The parties must use currently available Commission procedures in any disputes regarding these payments.

6. Payment Delays for New Measures

Pacific proposes that when new measures are introduced, payments not be made on performance failures until the fourth month:

None of the payment provisions set forth in this plan will apply during the first three months after a CLEC first purchases the type of service or unbundled network element(s) associated with a particular performance measurement or introduction of a new measure. Pacific Plan at 14.

The CLECs partially agree. They agree that upon introduction of a new measure, the results will not be subject to incentive payments until the third full month of reportable results. CLEC Open. Comm. at 33. However, we note that new measures are adopted by the Commission after the parties have performed these initial trials. Once the Commission adopts these new measures they may produce incentive payments immediately. Prior to this implementation, however, the JPSA adopted in D.01-05-087 must be modified for a new measure to be included in the incentives plan. Proceedings to modify the JPSA and D.01-05-087 must be completed before any new measure can produce payment. It is more appropriate for the Pacific-CLEC agreement regarding new measure implementation to be included in JPSA modification proceedings. Therefore, we do not need to include this provision in the incentives plan, and we decline to do so.

Regarding Pacific's desire to be free of liability for poor performance for the three months after a CLEC first orders a new service, we do not find consensus among the parties. The CLECs object and point out that the first months can be the most critical months for a CLEC. CLEC Open. Comm. at 34. We agree. We are particularly concerned about the viability of new small CLECs who may invest precious resources in marketing new services. For an ILEC to be free of liability for three months could easily put such new competition in jeopardy. For this reason, we decline to adopt this provision.

7. Small Sample Aggregates

Pacific commented that the draft decision's "Category 2" small sample aggregate assessments are no longer useful, and add considerable complexity to the plan, contrary to our goal of simplicity. n97 Pacific Open. Comm. DD at 15 - 16. We agree that the category would add considerable complexity. Category 2 consisted of special aggregates created by combining the smallest samples. These aggregates are comprised of results from different CLECs each month because as CLEC sample sizes vary, many CLECs have sample sizes that qualify them for inclusion in some months but not others. This variation makes it difficult to track chronic and extended chronic failures, either with the programming

that Pacific must create or in any reviews that might be performed by staff or independent auditors. While Pacific originally opposed the CLEC desire to assess sample sizes down to those with only a single case, n98 they now have agreed to include all small samples in the draft decision's Category 1, which we now designate Category A.

----------Footnotes----------

n97 To avoid confusion between category numbers in the draft decision and the plan we adopt, we have changed the category designations from numeric to alphabetic. Categories 1, 3 and 4 are now designated A, B, and C, respectively. We no longer include the category designated Category 2 in draft decision.

n98 *Post-workshop Reply Brief of AT&T Communications of California, Inc. (U-5002-C), MGC Communications, Inc. (U-5859-C), WorldCom, Inc. on Performance Incentives* at 2, May 5, 2000.

----------End Footnotes----------

We take official notice of an assessment by staff to determine the effect of abolishing Category 2. n99 Staff found that without Category 2 and including all samples in Category 1 (now Category A), incentive payments were greater by an average of $ 18,645 per month from July 1999 to November 2001, and greater by an average of $ 14,179 per month for the most recent twelve-months in that period. We find that this change is a reasonable correction to our plan since it reduces complexity, represents a better agreement between Pacific and the CLECs, and has no apparent detrimental effects.

----------Footnotes----------

n99 In response to staff's request, Pacific's consultant provided performance data and programming to allow staff to compare the plan with and without Category 2.

----------End Footnotes----------

8. Performance Assessments and Measurements

As Pacific worked to implement the *Interim Opinion* performance assessment requirements, it found a few problems. Pacific proposes modifications to correct those implementation problems. Pacific Open. Comm. at 27-28. Specifically, Pacific requests three changes: (1) that an additive constant be used for all log transformations, (2) that the Modified t-test be applied to Measure 44 without transformations, and (3) that the Fisher's Exact Test be used for all percentage-based results regardless of sample size. No party opposes these changes. For the reasons cited by Pacific, we adopt these changes. *Id.*

More recently, Pacific found measurement errors in Performance Measure 16, *Percentage Troubles in 30 Days for New Orders*. Pacific Open. Comm. at 20. Not only was the measurement's validity questionable, but in some cases the statistical test required by the Interim Opinion could not be applied. This mis-measurement is evidenced in the *JPSA*, which defines the calculation as:

"Total Number of Customer Trouble reports received within 30 calendar days of special service order completion [divided by] Total number of new, move, and change orders." *JPSA*, May 24, 2001, Attachment C at 57.

The measure ideally would document the same set of orders for both the numerator and denominator. That is, the total number of orders would be compared to the number of trouble reports for those specific orders. However, when read literally this definition requires trouble report and order counts to be taken from the same month. If the number of orders is constant from month to month for each CLEC, then the literal definition produces the same results as the ideal measurement. However, that is not the case. For example, if there were 10 orders in January and three orders in February, if four of the January orders had trouble reports registered in February, then a February trouble report percentage would be calculated as 133 percent (4/3), even though the correct percentage was forty percent (4/10) for the actual orders. True percentages over 100 percent are not only impossible, n100 but the Fisher's Exact Test cannot be applied, as it cannot calculate probabilities for percentages over 100. Trouble reports occurring in February for the February orders could further distort the measurement. This problem is exacerbated by small samples. Small samples

tend to vary proportionally more than large samples, and thus can more easily lead to a miss-match of orders versus trouble reports.

----------Footnotes----------

n100 I.e., when there are three orders, there is no way that more than three orders can have troubles.

----------End Footnotes----------

Pacific proposed two potential corrections to this problem. Staff requested that Pacific test both potential solutions and report the results. The option of combining two months data caused problems with chronic and extended chronic assessments and did not reduce the number of test application errors. n101 In contrast, the option of performing the test only on aggregate results reduced the number of test errors from twenty-two to three. Additionally, staff determined that the proposed solution did not result in a windfall of reduced payments. n102 For the above reasons, for this initial plan implementation we adopt Pacific's second recommendation, which assesses performance and payment amounts for industry-aggregate performance. However, we recognize that while this solution provides improved assessment, it may be reasonable only as a temporary solution as it still does not capture the ideal data. We instruct Pacific to assist the staff and the parties in evaluating this and other potential solutions, and instruct the parties to revisit and resolve Performance Measure 16 problems, and if necessary, to revise Performance Measure 16 measurement rules.

----------Footnotes----------

n101 I.e., the number of results over 100 percent.

n102 The failure rate increased slightly when PM 16 was included in Category B. We take official notice of these failure rates: 7.5% for the original analyses and 9.6% for the aggregate analysis, and that with the addition of an appropriate weight for Category B *Ordinary Failures*, the payment amount increased slightly.

----------End Footnotes----------

Pacific also requested a correction for two count-based sub-measures in Performance Measures 20 and 23, pointing out that there was no aggregate measure for these performance measures. n103 Pacific Open. Comm. DD at 17. We find that this correction simply adds an aggregate-level measurement where one previously did not exist, and thus is non-controversial. We adopt this correction.

----------Footnotes----------

n103 These two count-based sub-measures are 2097401 and 2393801.

----------End Footnotes----------

9. Additional Corrections

The CLECs point out that the draft decision did not include benchmark performance measures in Tier II assessments and payments. CLEC Open. Comm. DD, Attachment at 3. We agree that given the purpose of Tier II assessments and payments, it would be a mistake to exclude benchmark measures. We will make the correction they suggest.

The CLECs also point out that Category B (ex-Category 3) failed to list *Ordinary Failure* payments, and as a consequence Category B payments were too low. CLEC Open. Comm. DD at 17, Attachment at 3. We agree that to exclude *Ordinary Failures*, and an appropriate weighting, overlooks the importance of single-month performance. We have added *Ordinary Failures* to the Category B assessments. Regarding the weighting for Category B, it should have a weight that will provide the same impact as if these measures were not aggregated. Multiplying by the average number of CLECs "touching" these sub-measures will ensure corresponding impact, and we adopt this weight for *Ordinary Failures* for Category B. n104

----------Footnotes----------

n104 We take official notice of staff's calculation results. Using data and programs supplied by Pacific's consultant, staff calculated that the average number of CLECs touching Category B sub-measures is approximately ten.

----------End Footnotes----------

In its comments on the draft decision, Pacific pointed out that by including all Performance Measure 1 sub-measures in Category B, the draft decision included some measures of manual processes, and thus was inconsistent with the purpose of Category B. Pacific Open. Comm. at 17. We correct this oversight. Pacific also points out that benchmark small sample adjustment tables need to be established for new benchmark performance levels and that the plan should be explicit regarding the application of small sample adjustment tables to aggregate data. *Id.* at 18. We agree. In the *Interim Opinion* we described the method we used to create these tables so new tables could be constructed for new benchmarks. *Interim Opinion*, App. K at 8, fn. 6. We have added new tables for the new benchmarks and have simplified the method used to create these tables. n105 Additionally, we will add language to the performance incentives plan to clarify that benchmark small sample adjustment tables are used for industry-aggregates consistent with the *Interim Opinion. Id.* at 11 - 12, steps 1 and 2.

----------Footnotes----------

n105 Documentation for this simplified method is included in the attachments to our performance incentives plan. The new method produces tables identical to those created by the more complicated method used in the *Interim Opinion*. The simplified method does not alter the rationale, criteria, or outcomes of the *Interim Opinion* method. See *Interim Opinion*, App. K, Attach. 2.

----------End Footnotes----------

10. Incorporation into Interconnection Agreements

In their comments to the draft decision, Pacific and the CLECs point out that they have previously agreed that any performance incentives plan adopted by the Commission could be an option that the CLECs could elect in lieu of remedies negotiated in interconnection agreements. Pacific Open. Comm. DD at 21 -22; CLEC Repl. Comm. DD at 4 - 5. We agree that Pacific and the CLECs should be able to choose one of the two options, but only as long as it does not affect the third party in the plan, the ratepayers. Consequently, we will allow Pacific and the CLECs this option subject to Commission approval. Pacific shall offer our performance incentives plan to each CLEC doing business in California with any alterations agreed to by Pacific and the CLECs subject to Commission approval.

11. Verizon

While we have intended to adopt simultaneously the same plan for Verizon as we adopt for Pacific, as Verizon notes in its comments on the DD, most of our analyses in this decision have been performed for Pacific. We could delay adoption of a plan for Pacific while we perform additional analyses for Verizon, but do not wish to delay Pacific further. We anticipate that this performance incentives plan will be a key component of Pacific's 271 application to enter the long-distance market, and our disposition of their application will partly depend on the implementation of this plan. In contrast, Verizon is already in the long-distance market. Verizon was not a regional Bell operating company before its merger with Bell Atlantic of New York, and consequently was not prohibited from offering long-distance services. So to prevent undue delay to Pacific, we will adopt this performance incentives plan only for Pacific at this time. We intend to adopt this plan for Verizon, by means of a separate decision, within the next few weeks pending further analyses.

V. Conclusions

Pacific is anxious to complete this component of their quest into the long distance market, we are anxious to bring enhanced competition to California, and a performance incentives plan is an essential part of that effort. We adopt a plan that is generally based on Pacific's plan because we find it to be more stable and functionally appropriate. We have made many significant modifications to the plan to better follow the criteria we have discussed in this decision. We offer this plan for Pacific's OSS performance to the parties so that they may get on with the business of providing competitive phone services to California residents.

We believe this plan is sufficient and appropriate to give Pacific incentives to provide non-discriminatory OSS access. We anticipate enhancements and refinements to this plan as a result of the experience and insights gained during and beyond the six-month initial implementation. In fact, we expect that the first review after the six-month initial implementation will be followed by regular periodic reviews and modifications. While this plan likely can be improved, as any state plan now in existence can be improved, it is more important to recognize that the plan is sufficient and that any instant improvements are not as important as bringing the benefits of a more competitive market to California's citizens.

We consider this Performance Incentive plan to be an integral part of Pacific's request for long distance authorization in California pursuant to Section 271. As Pacific concedes in its comments on the DD, the plan we adopt today provides a public interest showing that the FCC will give significant weight to in determining whether a sufficient anti-backsliding mechanism exists to support a Section 271 application. In offering this plan to the CLECs as part of its showing that it is in the public interest, Pacific will need to agree that the Commission retains jurisdiction over the plan, including the authority to modify any provision, and that the plan will continue in effect until terminated by the Commission.

VI. Comments on Draft Decision

The draft decision of ALJ Reed in this matter was mailed to the parties in accordance with Pub. Util. Code § 311(g)(1) and Rule 77.7 of the Rules of Practice and Procedure. Comments were filed on December 28, 2001 and reply comments were filed on January 4, 2002. We have reviewed the comments, and taken them into account, as appropriate, in finalizing this order.

Findings of Fact

1. Performance measurements have been adopted in D.01-05-087.

2. Performance assessment criteria have been adopted in D.01-01-037.

3. The FCC has strongly encouraged states to establish regulatory incentives to ensure that ILEC OSS performance does not present barriers to competition.

4. The FCC has stated that RBOC Section 271 applications must be in the public interest to be approved.

5. The FCC has stated that "the fact that a BOC will be subject to performance monitoring and enforcement mechanisms would constitute probative evidence that the BOC will continue to meet its section 271 obligations and that its entry would be consistent with the public interest."

6. Since the initial filing of this proceeding, the parties have collaborated to establish performance measures, performance assessment criteria, and incentive payment structures.

7. The Administrative Law Judge convened a three-day workshop to develop a payment structure that would determine monetary amounts (performance incentives) paid by the ILEC for deficient OSS performance.

8. Pacific, Verizon, the CLECs, and ORA submitted performance incentive payment structure plan proposals.

9. Pacific and Verizon performed data runs on the submitted plans to assess the payment amounts generated by actual and simulated performance.

10. To prevent undue delay to Pacific, we will adopt this performance incentives plan only for Pacific at this time.

11. The payment amounts generated by Pacific, Verizon, the CLECs, and ORA's plans vary widely, ranging from approximately $ 50,000 per month for Pacific's plan to approximately $ 9 million per month for the CLEC's plan when the plans are projected onto Pacific's performance for the last quarter of 2000.

12. At parity performance levels simulated by Pacific, the payments range from approximately $ 10,000 per month for Pacific's plan to over $ 3 million per month for the CLECs' plan.

13. At non-parity performance levels simulated by Pacific that result in a 38 percent failure rate, the payments range from approximately $ 1 million per month for ORA's plan to over $ 48 million per month for the CLEC's plan.

14. Pacific's and the CLECs' plans propose a maximum annual liability at risk of thirty-six percent of Pacific's annual net return from local exchange service.

15. Pacific's net return from local exchange service in 2000 was $ 1,527,942,000.

16. Pacific's proposed maximum annual liability at risk is currently $ 550,059,120.

17. Pacific's plan's payments per performance failure are increased depending on the pervasiveness of performance failures, also termed the failure rate.

18. Pacific's plan proposes that Pacific be forgiven for up to the percentage of failures that would be expected under parity conditions except for the worst ten percent of the time.

19. Pacific's plan increases payment amounts for repeated failures.

20. Pacific's plan applies the 0.20 conditional critical alpha level to aggregate monthly samples larger than 30 cases.

21. Pacific's 0.20 conditional critical alpha level is applied only to three-month consecutive failures.

22. The CLECs' plan increases payments for repeated failures.

23. The CLECs' plan increases payments for the severity of the individual failures effectively using the statistical test p-value as a surrogate for severity.

24. The CLEC's plan forgives a maximum of fifteen percent performance failures, except that severe failures are excluded from the forgiveness plan.

25. The CLECs' 0.20 conditional critical alpha level is applied to sample sizes of less than 30 cases.

26. The CLEC's conditional alpha provisions include a decreased critical alpha level of 0.05 percent for aggregate samples.

27. Verizon's plan proposes a maximum annual liability at risk rising from approximately $ 20 million in year one to $ 40 million in year three.

28. Thirty-six percent of Verizon's 2000 net return from local exchange service was approximately $ 166 million.

29. Verizon's plan payment amounts are based on transaction volumes, generally the number of CLEC customers who experience service worse than the average level for Verizon's retail customers.

30. Verizon's plan payment amounts are based on a severity measure, the percentage of CLEC customers who experience service worse than the average level for Verizon's retail customers.

31. Verizon's plan proposes a 0.20 conditional critical alpha level, the same as Pacific's conditional alpha provision.

32. Verizon's plan has a forgiveness provision similar to Pacific's.

33. Verizon's plan leaves out performance measures required by D.01-05-087 and agreements between the parties.

34. ORA's plan-proposes no payment caps.

35. ORA's plan would have the payments go the ratepayers.

36. ORA's plan does not forgive any identified failures.

37. ORA's plan increases payments for the severity of the individual failures effectively using the statistical test p-value as a surrogate for severity.

38. ORA's plan does not specify a 0.20 conditional critical alpha level.

39. A payment cap of thirty-six percent of annual net return from local exchange service has been adopted by four of the seven states with Section 271 approval, and the two other states have adopted similar percentages.

40. The FCC has approved a payment cap of thirty-six percent of annual net return from local exchange service as being a sufficient incentive to motivate non-discriminatory OSS behavior, in conjunction with other incentives.

41. Procedural caps are necessary to protect ILECs against unintended financial liability caused by unforeseen circumstances.

42. Monthly procedural caps payment amounts proportional to those adopted in New York and Texas are $ 15 million for Pacific and $ 4.5 million for Verizon.

43. The new provisions the ILECs have proposed in response to our instructions in the *Interim Opinion* only reduce Type I error.

44. Proposed mitigation provisions decrease Type I error at the expense of Type II error.

45. Type II error disadvantages the CLECs.

46. The appropriate percentage of statistical failures that occurs from random variation has not been accurately estimated because it is affected to an undetermined degree by statistical artifacts and by the provision of better service.

47. Log transformations have not completely normalized average-based measure data.

48. The appropriate percentage of statistical failures that occurs from random variation can be calculated from accurate performance simulations.

49. The purpose of our incentive plan is not to reward or credit an ILEC for giving OSS advantages to the CLECs.

50. The purpose of our incentive plan is to ensure that an ILEC does not present OSS barriers to the CLECs.

51. A mitigation plan equal to or greater than the critical alpha level could serve as an incentive for gaming behavior.

52. If an ILEC provided ninety percent of its OSS service that was so good that random variation had been eliminated as a potential cause for missing a sub-measure, and the remaining ten percent of the service failed the performance statistical tests, it is most likely that nearly all of the ten percent missed performance measures are actual failures.

53. There is insufficient information in the record of this proceeding to appropriately apply a correction for random variation because each type of test will have a different failure rate at parity and non-parity levels.

54. The effect of a forgiveness percentage based on the critical alpha level would be arbitrary since critical alpha levels are selected without considering forgiveness percentage effects.

55. There is insufficient information in the record of this proceeding to determine the accuracy of the performance simulations.

56. Mitigation provisions are most important when an ILEC is providing parity OSS access.

57. It is unlikely that Pacific will provide *complete parity* within the six-month implementation period of our performance incentives plan. Complete parity is defined for the specific purpose of developing a statistically-based self-executing performance incentives plan. This assessment of parity will not necessarily generalize to the context of Pacific's 271 application.

58. The net resultant alpha level for Pacific's and Verizon's conditional alpha proposal is 0.008, much smaller than the unconditional standard, 0.10.

59. Pacific's and Verizon's conditional alpha proposals increase net resultant Type II error compared to the single-month application of the 0.10 alpha level.

60. Pacific's and Verizon's conditional alpha proposals reduce Type II error compared to using a 0.10 alpha level to assess each of the three months results for the Tier II chronic failure identification.

61. The application condition for the CLEC conditional alpha proposal is sample sizes of less than thirty.

62. Alpha level adjustments are helpful to decrease Type I error especially for large samples.

63. Pacific's assessment of the economic harm suffered by the CLECs from inequitable OSS access depends on multiple assumptions.

64. Changes in the assumptions in Pacific's assessment of economic harm from inequitable OSS access for CLECs cause large changes in economic harm.

65. Pacific estimates economic harm from thirty percent discriminatory service to be less than 0.04 percent of its net return from local exchange service.

66. Pacific offers payments equaling six percent of its local exchange service net return for thirty-eight percent performance failure rate.

67. The payment cap can provide a guide for setting payments for different failure rates.

68. The interpretation of lower failure rate outcomes is more ambiguous than the interpretation of higher failure rate outcomes.

69. A curvilinear relationship between the percentage of the payment cap and the percentage of performance failures can mitigate the ambiguity of lower failure rates if lower payment percentages are established for lower failure rates and payment percentages become increasingly higher as performance worsens.

70. Establishing a curvilinear payment guide that starts with a payment of from zero to one percent of the payment cap for service with a one to five percent failure rate adjusts for the ambiguity of lower failure rates.

71. Given the low power of the statistical tests ordered in D.01-01-037, it is likely that when two out of three statistical tests fail, the actual failure rate is closer to 100 percent.

72. Payments of 100 percent of the payment cap are warranted for identified failure rates of less than 100 percent.

73. Industry aggregate performance rates are generally about fifty-percent higher than CLEC-specific performance rates.

74. Establishing a curvilinear payment guide that reaches a payment of 100 percent of the payment cap for service with a fifty percent failure rate adjusts for small samples and low statistical test power.

75. Using the curvilinear payment guide for setting payments in relation to performance, Pacific's proposed payment amounts are much less than the guide.

76. The payment amounts follow the curvilinear trend that we seek, except at the very worst performance levels.

77. Pacific's performance is likely to remain at levels where our plan accurately follows the curvilinear target.

78. Pacific is unlikely to deteriorate to levels where the plan payments miss the target.

79. A simulation of parity performance shows that without any additional adjustment, Pacific will still be paying about $ 60,000 per month, on the average, when its performance corresponds to the simulation performance levels.

80. The provision deducting $ 60,000 from Pacific's incentive payments when it reaches parity simulation performance levels will not affect payments when Pacific's performance is worse than the parity simulation

81. When Pacific's performance is at or close to parity it will be making virtually no incentive payments.

82. Because of the existence of many different variables that affect payment amounts and failure rates, comparisons with payment and failure rates in other states with Section 271 approval are not precise.

83. Holding the single-month alpha level constant for identifications requiring consecutive monthly failures produces a much lower net Type I error rate than the rate for the single-month assessment.

84. When the single-month critical alpha level (maximum Type I error) is 0.20, a statistical assessment requiring three consecutive month failures to be identified as a failure for the purposes of incentive payments has a net critical alpha level of 0.008 as calculated by the formula: $p = 0.20^{<3>}$.

85. When the single-month beta result is 0.30 (Type II error), a statistical assessment requiring three consecutive month failures to be identified as a failure for the purposes of incentive payments has a net beta result of 0.657 as calculated by the formula: $p = 1 - (1 - 0.30)^{<3>}$.

86. When the single-month beta result is 0.30 (Type II error), a statistical assessment requiring six consecutive month failures to be identified as a failure for the purposes of incentive payments has a net beta result of 0.882 as calculated by the formula: $p = 1 - (1 - 0.30)^{<6>}$.

87. A binomial calculation shows that requiring five out of six consecutive month results to fail a 0.20 critical alpha statistical test to identify a statistical failure for the purposes of incentive payments results in a 0.0016 net maximum alpha level.

88. A binomial calculation shows that when the single-month beta result is 0.30 (Type II error), a statistical assessment requiring five out of six consecutive month results to fail to be identified as a failure for the purposes of incentive payments has a net beta result of 0.58.

89. Requiring the higher payment levels for chronic failure identifications to continue for subsequent single-month failures until two consecutive months pass performance tests will reduce the potential for gaming behavior.

90. Requiring the higher payment levels for chronic failure identifications to continue for subsequent single-month failures until two consecutive months pass performance tests will increase the chances of identifying and correcting poor performance when it occurs.

91. The CLECs' and ORA's plans indirectly address severity by using the probability statistic, Z, as a surrogate for severity.

92. All other things being equal, as a performance failure becomes more severe, the corresponding Z-statistic becomes larger (smaller p-values).

93. A Z-statistic is also influenced by sample size.

94. A less severe performance result can have a larger Z-statistic than a much worse result if its sample size is sufficiently larger.

95. The CLEC and ORA severity proposals could identify one CLEC's less severe results as more severe than another CLEC's results even when this is not the case.

96. In general, Verizon's plan calculates the percentage of customers who receive service worse than the average ILEC customer (or the benchmark), and then uses that number as a measure of severity to adjust payment amounts.

97. The severity measure is an integral part of Verizon's transaction-based incentive payment system, and is difficult to convert to a sub-measure-based approach.

98. Pacific's proposal to apply statistical testing to benchmarks does not examine the effect of random variation on assessments with underlying non-compliant conditions.

99. Pacific's plan provides relatively consistent output and is correlated to aggregate failure rates for the year 2000.

100. The CLEC, Verizon, and ORA plans' payment amounts are either not significantly correlated to aggregate failure rates and/or are inconsistent month-to-month.

101. For Pacific's performance and payments, the correlations between payment amounts and failure rates are 0.42 for Pacific, 0.13 for the CLECs, -0.12 for Verizon, and -0.01 for ORA and only Pacific's correlation is significant at the 0.10 level (N = 12).

102. Pacific's plan payment amounts can be adjusted for Pacific and Verizon to account for the different size of the two companies and to match the "curvilinear" payment guide.

103. The CLEC plan payment amounts are much higher than our payment amount guide.

104. Verizon's and ORA's plans are inconsistent from month-to-month, producing wide variations in payment amounts that are not related to the relatively small variations in aggregate failure rates.

105. Other problems with severity and volume-related metrics make the Verizon, CLEC, and ORA plans difficult to implement consistent with the criteria established in this decision.

106. Several significant modifications are necessary for Pacific's plan to be consistent with important criteria.

107. Pacific, GTE, and the CLECs collaborated on 2000 GTE Workpaper # 13, a list of performance measures and sub-measures to be excluded from the incentive payment plans.

108. Since our plan is scaled to Pacific's and Verizon's individual payment caps, their total payment amounts are no different than if fewer measures were used.

109. Where measures may be correlated in a performance incentive plan, there is still value in multiple measurements, unless the measures have perfect or near-perfect correlations.

110. There is no evidence in the record to suggest that the performance measures to be used in the incentive plan are so highly correlated that they add no value to the assessment.

111. The performance measures to be used in the incentive plan were established in a collaborative process.

112. To implement the performance incentive plan, the ILECs will need to implement monitoring, assessment, reporting, and payment provisions.

113. Inadequate CLEC forecasts of OSS demand would be cause for excluding incentive payments in the event that deficient OSS performance resulted from such forecasts.

114. The CLECs have agreed to provide forecasts as proposed by Pacific.

115. The CLECs and the ILECs are in the best position to know how to implement forecasts for the purposes of OSS operation.

116. In accordance with D.01-05-087, Pacific is required to report performance results by the twentieth calendar day of the month succeeding the reporting period.

117. Pacific proposes to make payments within thirty days of the due date of the performance results report.

118. Ratepayers are making a significant investment in the ILECs' OSS infrastructures.

119. To the extent that OSS performance presents competition barriers, the ratepayers will not benefit from their investment in the ILECs' OSS-related infrastructure and they will not have received the economic and social benefits of competition which motivated the 1996 Telecommunications Act.

120. Rule 33 and Tariff 38 billing surcharges are used to compensate Pacific and Verizon for the costs they incurred to implement local competition.

121. The Commission provides for surcredits to ratepayer in the event of poor service by a regulated telephone company.

122. Exogenous cost changes and other regulatory surcharges and surcredits are included in the annual Price Cap filings that Pacific and Verizon are required to make every October.

123. In the annual filings, the utilities identify specific cost changes (increases and decreases) that occurred in the prior period (e.g., from October 1 through September 30).

124. These cost changes are combined and summed to determine the dollar amount of surcredits or surcharges to be reflected on a customer's monthly bills during the next calendar year.

125. Surcredits and surcharges, such as Pacific's merger savings and local competition implementation costs, are distributed between three groups of services, IntraLATA Exchange, IntraLATA Toll Services, and IntraLATA Access Services, in proportion to each group's share of Pacific's total annual billing base.

126. The surcredit or surcharge percentages are applied to the tariffed rate of the individual services that comprise each of the three service groups (IntraLATA toll, access, and exchange).

127. The adopted surcharge or surcredit percentage is applied to the tariffed rate for the services in each service group and modifies the price that the customer pays for the respective service for the following year.

128. In D.00-09-037 and D.01-09-063 the Commission used Rule 33 and Tariff 38 as the mechanisms for the payment of Pacific's and Verizon's local competition implementation infrastructure costs by their customers.

129. Rule 33 and Tariff 38 surcharges/surcredits appear as separate line items on Pacific's and Verizon's bills respectively.

130. Using Rule 33/Tariff 38 mechanisms will delay payment disbursements to the ratepayers. For example, a payment incurred in January 2003 would not be reflected in the surcredits to be disbursed until 2004.

131. Since the line items have already been established, there is no need for the Commission to authorize the creation of new line items, thus avoiding billing system modification expenses.

132. There would be numerous logistical and efficiency problems in creating an entirely new structure to provide immediate payments to each individual ratepayer.

133. A monetary amount received in the future has less value to the recipient as the same amount received in the present.

134. A ratepayer should be "indifferent" to an amount received in the future versus an amount received now if the future amount were to be increased as if the ratepayer had spent or invested the money now.

135. Ratepayers should be "indifferent" to future payments if they perceive equity when comparing the interest rates they receive to the interest rates they pay to Pacific and Verizon.

136. Discrimination in restoring normal OSS services following widespread disruption due to accidents or other events could damage competition.

137. The record does not include an implementable EDR process.

138. A timeline for commencement of payments generated by new measures can be established in the performance measurement part of this proceeding.

139. Absence of ILEC liability for poor OSS performance to CLEC customers for the first three months of a CLEC's new service could jeopardize new competition.

140. Abolishing the draft decision's Category 2 reduces complexity, represents a better agreement between Pacific and the CLECs, and has no apparent detrimental effects.

141. Moving Performance Measure 16 into Category B (ex-Category 3) assessments improve the plan and is reasonable only as a temporary solution.

142. Moving Performance Measure 16 into Category B (ex-Category 3) assessments still does not capture the ideal data.

143. The plan we adopt today provides a public interest showing that the FCC will give significant weight to in determining whether a sufficient anti-backsliding mechanism exists to support a Section 271 application.

Conclusions of Law

1. Through this incentive plan, Pacific should be subject to performance monitoring and enforcement mechanisms.

2. Procedural caps should be adopted to protect ILECs against unintended financial liability caused by unforeseen circumstances.

3. The selection of an appropriate forgiveness percentage would be arbitrary because it is dependent on the critical alpha level selected for other reasons.

4. As determined by the Commission-approved performance measures and assessments, for the purposes of establishing the statistical procedures for this performance incentives plan, Pacific is not providing OSS parity.

5. The CLEC conditional alpha proposal is consistent with our directions in D.01-01-037.

6. Our estimated payment amounts in California are roughly comparable to actual payment amounts in Texas and New York.

7. Information that indicates an increased Type II error likelihood will help target alpha level adjustments to decrease Type II error where it is likely to be more beneficial.

8. Information that indicates an increased Type I error likelihood will help target alpha level adjustments to decrease Type I error where it is likely to be more beneficial.

9. A reasonable "anchor" for assessing the full monthly payment cap amount is a single-month CLEC-specific failure rate of fifty percent.

10. Using the curvilinear payment guide for setting payments in relation to performance, Pacific's proposed payment amounts are insufficient.

11. Adjustments for the severity of performance failures can enhance an incentive plan's ability to target the most deficient performance by making incentive payments greater for the more severe failures.

12. Statistical tests provide greater confidence (higher Z-statistics, lower p-values) when applied to larger samples, compared to otherwise equal small samples.

13. Without an examination of the effect of random variation on assessments with both underlying compliant and non-compliant conditions, we cannot fairly implement statistical testing for benchmarks.

14. A performance incentives plan should be consistent over time.

15. A performance incentives plan should reflect differences in performance.

16. A performance incentives plan should produce equitable outcomes for both ILECs.

17. Pacific's plan, with several significant modifications set forth in Appendix J, should be adopted as the best base plan consistent with important criteria.

18. The list of all the measures and sub-measures excluded from incentive payments, set forth in 2000 GTE Workpaper # 13, should be adopted.

19. The CLECs should provide forecasts as proposed by Pacific in its March 23, 2001 proposed plan.

20. Pub. Util. Code § 2104 does not compel us to decree the incentive payments to be liquidated damages and the CLECs' exclusive remedy for discriminatory ILEC performance.

21. The performance incentive plan payments should not be considered to be the exclusive remedy for deficient OSS performance.

22. We have crafted this plan in concert with the parties in order to implement the federally mandated restructuring of the local market.

23. Pub. Util. Code § 454 gives the Commission statutory authority to establish rates and charges for regulated telecommunications companies.

24. The Commission should require Tier I performance incentive amounts to become billing credits to adjust the rates that CLECs pay to Pacific for local exchange services. Incentive amounts in excess of a CLEC's monthly bill should be added to Tier II amounts.

25. The Commission should require Tier II performance incentive payments to go to ratepayers through Pacific's surcharge and surcredit mechanisms: Pacific's Rule 33 (Schedule Cal. P.U.C. No. A2.1.33 -- Billing Surcharges of Pacific's tariffs).

26. Since ratepayers are making a significant investment in the ILECs' OSS infrastructures, it follows that they should receive incentive payments, which are directly related to the extent that those infrastructures do not perform as they should.

27. Rule 33 billing surcharges are appropriately used to compensate Pacific for the costs it incurred to implement local competition.

28. The Commission should provide surcredits to ratepayers in the event of poor service by a regulated telephone company.

29. The Commission should require Pacific to make monthly payments into an interest-bearing memorandum account, with an interest rate equal to the tariffed rate Pacific charges its customers for late payment, with the interest compounded monthly, and with interest accrual beginning immediately after the incentive payments are due and continuing to accrue on all amounts not yet credited to the ratepayers.

30. The Commission should require that Pacific Bell identify in its separated intrastate results of operations monitoring reports an adjustment clearly identifying the annual performance incentive payments, and remove from the California intrastate results of operations, and the earnings monitoring reports, the payments made to the performance incentive memorandum account.

31. Incentive payments should not be the exclusive remedy for deficient performance.

32. An implementable EDR process is not currently available for the incentives plan.

33. Until an EDR process is implemented, the ILECs should automatically make incentive payments as indicated by the incentive plan we adopt.

34. Until an EDR process is implemented, the parties should use currently available Commission procedures in any disputes regarding these payments.

35. When new measures are introduced, payments should not be made on performance failures until the fourth month.

36.Under the adopted incentive plan, results for the first three months with activity for a new measure should not be subject to payments.

37. Regardless of which day during the month a CLEC first accesses the newly measured OSS function, that month should be deemed the first month for calculation purposes under the adopted payment plan.

38. The first, second, and third months' performance results should not be subject to incentive payments, and the fourth month should be subject to payments, with the results reported on the 20th day of the fifth month, and payments due thirty days thereafter.

39. Delineated changes to the performance assessment requirements of D.01-01-037 should be made to successfully and efficiently implement the performance incentives plan.

40. The payment amounts generated by the plan, are close to the payment target, correspond to our payment rationale, and are reasonable.

41. It is reasonable to reduce Pacific's payment amount when (1) Pacific's failure rates are no higher than the rates for each category in the parity simulation, and (2) Pacific has no chronic or extended failures for those measures and sub-measures designated by the parties as sufficiently important to have no minimum sample size.

42. In offering this plan to the CLECs as part of its showing that it is in the public interest, Pacific will need to agree that the Commission retains jurisdiction over the plan, including the authority to modify any provision, and that the plan will continue in effect until terminated by the Commission.

43. We intend to adopt this plan for Verizon, by means of a separate decision, within the next few weeks pending further analyses.

44. The incentive plan set forth in Appendix J is reasonable, consistent with law, and in the public interest.

45. This decision should be effective today so that the incentive plan can be promptly implemented.

ORDER

IT IS ORDERED that:

1. A performance incentives plan, which identifies performance failures and non-failures, as specified in Appendix J incorporated by reference herein, shall be adopted for Pacific Bell (Pacific) to offer to CLECs.

2. The performance incentives plan, comprised of the performance measurements adopted in Decision (D.) 01-05-087, the decision model adopted in D.01-01-037 and as modified herein, and an incentive payment component adopted herein, shall be offered to the CLECs, and where accepted, implemented for an initial period of at least six months or until otherwise modified by this Commission.

3. Pacific and any CLEC may agree to use a different performance incentives plan, subject to approval by this Commission.

4. Parties to this proceeding shall collaborate to review and recommend any appropriate revisions for the definition and/or use of Performance Measure 16.

5. Incentive payments, as specified in Appendix J of this decision, shall commence the first full month following the effective date of this order.

6. Following the six-month initial period, the performance of the incentives plan model shall be reviewed. Such review shall examine how the incentives plan model is functioning and shall include any adjustments and modifications to the components as well as the resolution of any issues remaining from D.01-01-037.

7. The schedule for the incentives plan model review shall be set by separate ruling.

This order is effective today.

Dated March 6, 2002, at San Francisco, California.

APPENDICES A THRU K

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Appendix A: List of Filings Containing Parties' Final Proposed Incentive Plans, Plan Data Runs, and Plan Comments

Final Proposed Plans

Pacific Bell Telephone Company's (U 1001 C) Submission of Performance Remedies Plan. Filed March 23, 2001, Pacific Bell Telephone Company.

Revised Interim Verizon Performance Plan for the State of California. Filed May 4, 2001, Verizon California, Inc.

Updated Interim Incentive Model. Filed May 4, 2001, Office of Ratepayers Advocates, California Public Utilities Commission.

Participating Competitive Local Exchange Carriers' Second Revised Interim Performance Incentives Plan. Filed May 11, 2001, Participating Competitive Local Exchange Carriers (CLECs). n1

- - - - - - - - - - - - - - - - - -Footnotes- - - - - - - - - - - - - - - - -

n1 The Participating CLECs include AT&T Communications of California, Inc. (U-5002-C, ICG Telecom Group, Inc.. (U-5406-C), New Edge Networks, Inc. (U-6226-C), Pac-West Telecomm, Inc. (U-5266-C), WorldCom, Inc., and XO California, Inc. (U-6272-C).

----------End Footnotes----------

Data Runs

Pacific Bell Telephone Company's Submission of Comparisons of Proposed Performance Incentives Models. Filed April 27, 2001, Pacific Bell Telephone Company.

Pacific Bell Telephone Company's Second Submission of Comparisons of Proposed Performance Incentives Models. Filed May 7, 2001, Pacific Bell Telephone Company.

Attachment to: Pacific Bell Telephone Company's (U 1001 C) Opening Comments on Performance Remedies Plan (May 18, 2001). Filed May 18, 2001, Pacific Bell Telephone Company.

Submission of Verizon California Inc. of Data Results for Proposed Interim Incentive Plans, and Correction of Verizon's Proposed Interim Incentive Proposal. Filed May 4, 2001, Verizon California, Inc.

Second Data Results Submission of Verizon California Inc. Filed May 11, 2001, Verizon California, Inc.

Verizon's letter to the Docket Office re: Second Data Results Submission of Verizon California Inc. (5 copies of CD-ROM discs) Filed May 16, 2001, Verizon California, Inc.

Appendix A to: Pacific Bell Telephone Company's (U 1001 C) Opening Comments On Draft Decision On The Performance Incentives Plan, Filed December 28, 2001, Pacific Bell Telephone Company.

Data Results Submission Of Verizon California Inc. (U 1002 C), Filed December 28, 2001, Verizon California, Inc.

Comments

Pacific Bell Telephone Company's (U 1001 C) Opening Comments on Performance Remedies Plan (May 18, 2001). Filed May 18, 2001, Pacific Bell Telephone Company.

Opening Comments of Verizon California Inc. (U 1002) Concerning Exchanged Data Runs Applicable to Proposed Interim Incentive Plans. Filed May 18, 2001, Verizon California, Inc.

Comments of the Participating Local Exchange Carriers Regarding Performance Remedies Plans. Filed May 18, 2001, CLECs.

Opening Comments of the Office of Ratepayers Advocates to the Proposed Interim Performance Incentives Plan. Filed May 18, 2001, Office of Ratepayers Advocates, California Public Utilities Commission.

Pacific Bell Telephone Company's (U 1001 C) Opening Comments on the CLECs' and Verizon's Proposed Performance Remedies Plan (May 25, 2001). Filed May 25, 2001, Pacific Bell Telephone Company.

Opening Comments of Verizon California Inc. (U 1002 C) Regarding May 11, 2001 Data Runs Performed By Pacific Bell. Filed May 25, 2001, Verizon California Inc.

Supplemental Comments of the Office of Ratepayer Advocates to Pacific Bell's May 18 Data Analysis of the Proposed Interim Performance Incentives Plans Submitted By Verizon, Inc. and the Competitive Local Exchange Carriers, Filed May 25, 2001, Office of Ratepayer Advocates, California Public Utilities Commission.

Pacific Bell Telephone Company's (U 1001 C) Reply to the Comments Filed May 18, 2001 on the Proposed Performance Remedies Plan (June 1, 2001). Filed June 1, 2001, Pacific Bell Telephone Company.

Reply Comments of Verizon California Inc. (U 1002C) Concerning Exchanged Data Runs Applicable to Interim Incentive Plans. Filed June 1, 2001, Verizon California, Inc.

Responses of the Participating Competitive Local Exchange Carriers Regarding the May 18, 2001 Filings of Pacific Bell and Verizon California, Inc. Filed June 1, 2001, CLECs.

Concurrent Reply Comments of the Office of Ratepayer Advocates to the Opening Comments on Proposed Interim Performance Incentive Plans. Filed June 1, 2001, Office of Ratepayer Advocates, California Public Utilities Commission.

Errata to the Concurrent Reply Comments of the Office of Ratepayer Advocates to the Opening Comments on Proposed Interim Performance Incentive Plans. Filed June 1, 2001, Office of Ratepayer Advocates, California Public Utilities Commission.

Comments of the Participating Competitive Local Exchange Carriers (CLECs) Regarding the Pacific Bell Data Outcomes For the Plans Submitted By Verizon California, Inc. and the CLECs, and the Verizon Data Outcome For the CLECs Plan, Filed on May 18, 2001. Filed June 4, 2001, CLECs.

Opening Comments of the Office of Ratepayer Advocates to Verizon's Revised Data Analyses of the Proposed Interim Performance Incentive Plans. Filed June 4, 2001, Office of Ratepayer Advocates, California Public Utilities Commission.

Pacific Bell Telephone Company's (U 1001 C) Reply to the Clecs' Comments Filed June 4, 2001 on the Proposed Performance Remedies Plan (June 8, 2001). Filed June 8, 2001, Pacific Bell Telephone Company.

Reply Comments of Verizon California Inc. (U 1002 C) to the Further Opening Comments of the Clecs and Ora. Filed June 8, 2001, Verizon California, Inc.

Comments of the Participating Competitive Local Exchange Carriers (CLECs) Regarding the Opening Comments of Pacific Bell on the CLECs' and Verizons' Plans Filed May 25, 2001. Filed June 8, 2001, CLECs.

Concurrent Reply Comments of the Office of Ratepayer Advocates to the Opening Comments on Exchanged Data Runs Applicable to Proposed Interim Performance Incentive Plans. Filed June 8, 2001, Office of Ratepayer Advocates, California Public Utilities Commission.

Pacific Bell Telephone Company's (U 1001 C) Opening Comments on Draft Decision on the Performance Incentives Plan, Filed December 28, 2001, Pacific Bell Telephone Company.

Opening Comments of the Participating Competitive Local Exchange Carriers on the Draft Decision Adopting a Performance Incentives Plan, Filed December 28, 2001, CLECs.

Comments of Verizon California Inc. (U 1002 C) to the Commission's Draft Decision Regarding Incentive Payments, Filed December 28, 2001, Verizon California, Inc.

Comments of the Office of Ratepayer Advocates to the Draft Decision of Administrative Law Judge Reed, Filed December 28, 2001, Office of Ratepayer Advocates, California Public Utilities Commission..

Pacific Bell Telephone Company's (U 1001 C) Reply Comments on Draft Decision on the Performance Incentives Plan, Filed January 4, 2002, Pacific Bell Telephone Company.

Reply Comments of the Participating Competitive Local Exchange Carriers on the Draft Decision Adopting a Performance Incentives Plan, Filed January 4, 2002, CLECs.

Reply Comments of Verizon California Inc. (U 1002 C) to the Commission's Proposed Incentive Payment Opinion, Filed January 4, 2002, Verizon California, Inc..

Concurrent Reply Comments of the Office of Ratepayer Advocates on the Draft Decision of Administrative Law Judge Reed, Filed January 4, 2002, Office of Ratepayer Advocates, California Public Utilities Commission.

Appendix B: Payment Amounts Generated by the Proposed Plans.

Sources:

Payment amounts: Attachment to *Pacific Bell Telephone Company's (U 1001 C) Opening Comments on Performance Remedies Plan (May 18, 2001)*. Filed May 18, 2001, Pacific Bell Telephone Company.

Graphed aggregate failure rates: Calculated by staff using program and data files provided by Pacific Bell.

5/7/2001

Results from the Pacific Plan on Real Data without Logs

		Mitigation and Conditional Failure			Mitigation and No Conditional Failure		
Year	Month	Tier I	Tier II	Total	Tier I	Tier II	Total
2000	Jan	$ 52,400	$ 12,000	$ 64,400	$ 52,400	$ 0	$ 52,400
2000	Feb	$ 37,150	$ 7,500	$ 44,650	$ 37,150	$ 0	$ 37,150
2000	Mar	$ 28,450	$ 5,000	$ 33,450	$ 28,450	$ 0	$ 28,450
2000	Apr	$ 28,050	$ 4,500	$ 32,550	$ 28,050	$ 0	$ 28,050
2000	May	$ 28,900	$ 4,000	$ 32,900	$ 28,900	$ 0	$ 28,900
2000	Jun	$ 25,750	$ 6,500	$ 32,250	$ 25,750	$ 0	$ 25,750
2000	Jul	$ 33,300	$ 7,000	$ 40,300	$ 33,300	$ 0	$ 33,300
2000	Aug	$ 38,150	$ 10,000	$ 48,150	$ 38,150	$ 0	$ 38,150
2000	Sep	$ 34,050	$ 8,500	$ 42,550	$ 34,050	$ 0	$ 34,050
2000	Oct	$ 39,150	$ 11,000	$ 50,150	$ 39,150	$ 0	$ 39,150
2000	Nov	$ 30,900	$ 11,000	$ 41,900	$ 30,000	$ 0	$ 30,900
2000	Dec	$ 29,150	$ 5,500	$ 34,650	$ 29,150	$ 0	$ 29,150
	Total	$ 405,400	$ 92,500	$ 497,900	$ 405,400	$ 0	$ 405,400
	Avg	$ 33,783	$ 7,708	$ 41,492	$ 33,783	$ 0	$ 33,783

		No Mitigation and Conditional Failure			No Mitigation and No Conditional Failure		
Year	Month	Tier I	Tier II	Total	Tier I	Tier II	Total
2000	Jan	$ 164,300	$ 28,000	$ 192,300	$ 164,300	$ 0	$ 164,300
2000	Feb	$ 108,550	$ 9,500	$ 118,050	$ 108,550	$ 0	$ 108,550
2000	Mar	$ 82,300	$ 7,500	$ 89,800	$ 82,300	$ 0	$ 82,300
2000	Apr	$ 104,600	$ 6,500	$ 111,100	$ 104,600	$ 0	$ 104,600
2000	May	$ 96,200	$ 6,500	$ 102,700	$ 96,200	$ 0	$ 96,200
2000	Jun	$ 101,200	$ 9,000	$ 110,200	$ 101,200	$ 0	$ 101,200
2000	Jul	$ 113,650	$ 9,000	$ 122,650	$ 113,650	$ 0	$ 113,650
2000	Aug	$ 136,200	$ 12,000	$ 148,200	$ 136,200	$ 0	$ 136,200
2000	Sep	$ 128,800	$ 10,500	$ 139,300	$ 128,800	$ 0	$ 128,800
2000	Oct	$ 110,850	$ 13,000	$ 123,850	$ 110,850	$ 0	$ 110,850
2000	Nov	$ 115,650	$ 13,000	$ 128,650	$ 115,650	$ 0	$ 115,650
2000	Dec	$ 96,450	$ 7,500	$ 103,950	$ 96,450	$ 0	$ 96,450
	Total	$ 1,358,750	$ 132,000	$ 1,490,750	$ 1,358,750	$ 0	$ 1,358,750
	Avg	$ 113,229	$ 11,000	$ 124,229	$ 113,229	$ 0	$ 113,229

Results from the Pacific Plan on Real Data with Logs

		Mitigation and Conditional Failure			Mitigation and No Conditional Failure		
Year	Month	Tier I	Tier II	Total	Tier I	Tier II	Total
2000	Oct	$ 41,750	$ 11,500	$ 53,250	$ 41,750	$ 0	$ 41,750
2000	Nov	$ 40,900	$ 12,000	$ 52,900	$ 40,900	$ 0	$ 40,900
2000	Dec	$ 38,550	$ 8,000	$ 46,550	$ 38,550	$ 0	$ 38,550
	Total	$ 427,400	$ 96,500	$ 523,900	$ 427,400	$ 0	$ 427,400

		No Mitigation and Conditional Failure			No Mitigation and No Conditional Failure		
Year	Month	Tier I	Tier II	Total	Tier I	Tier II	Total
2000	Oct	$ 128,200	$ 13,500	$ 141,700	$ 128,200	$ 0	$ 128,200
2000	Nov	$ 149,150	$ 14,000	$ 163,150	$ 149,150	$ 0	$ 149,150
2000	Dec	$ 123,400	$ 10,000	$ 133,400	$ 123,400	$ 0	$ 123,400
	Total	$ 1,436,550	$ 136,000	$ 1,572,550	$ 1,436,550	$ 0	$ 1,436,550

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Results from the CLEC Plan on Real Data without Logs

Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 4,677,944	$ 4,126,673	$ 8,804,617
2000	Feb	$ 3,420,514	$ 3,750,714	$ 7,171,229
2000	Mar	$ 3,402,581	$ 3,600,408	$ 7,002,989
2000	Apr	$ 3,990,822	$ 3,809,043	$ 7,799,866
2000	May	$ 4,108,831	$ 3,033,594	$ 7,142,426
2000	Jun	$ 4,553,750	$ 3,953,712	$ 8,507,462
2000	Jul	$ 3,395,739	$ 3,132,964	$ 6,528,703
2000	Aug	$ 4,584,810	$ 4,480,216	$ 9,065,026
2000	Sep	$ 4,570,444	$ 4,179,979	$ 8,750,423
2000	Oct	$ 4,083,838	$ 4,786,303	$ 8,870,141
2000	Nov	$ 3,810,718	$ 4,339,456	$ 8,150,174
2000	Dec	$ 4,045,131	$ 3,532,986	$ 7,578,117
	Total	$ 48,645,123	$ 46,726,049	$ 95,371,173

Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 4,640,444	$ 4,087,503	$ 8,727,947
2000	Feb	$ 3,383,225	$ 3,711,466	$ 7,094,692
2000	Mar	$ 3,355,144	$ 3,449,780	$ 6,804,925
2000	Apr	$ 3,911,896	$ 3,754,165	$ 7,666,061
2000	May	$ 4,077,224	$ 3,020,808	$ 7,098,033
2000	Jun	$ 4,464,562	$ 3,927,309	$ 8,391,871
2000	Jul	$ 3,341,272	$ 3,080,467	$ 6,421,739
2000	Aug	$ 4,494,537	$ 4,277,437	$ 8,771,974
2000	Sep	$ 4,524,723	$ 4,152,586	$ 8,677,308
2000	Oct	$ 4,000,724	$ 4,661,303	$ 8,662,028
2000	Nov	$ 3,651,799	$ 4,298,232	$ 7,950,031
2000	Dec	$ 3,974,544	$ 3,520,399	$ 7,494,944
	Total	$ 47,820,095	$ 45,941,456	$ 93,761,551

No Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 4,771,919	$ 4,126,673	$ 8,898,592

2000	Feb	$ 3,546,613	$ 3,750,714	$ 7,297,327
2000	Mar	$ 3,499,307	$ 3,600,408	$ 7,099,715
2000	Apr	$ 4,109,129	$ 3,809,043	$ 7,918,172
2000	May	$ 4,201,633	$ 3,033,594	$ 7,235,228
2000	Jun	$ 4,683,618	$ 3,953,712	$ 8,637,330
2000	Jul	$ 3,516,469	$ 3,132,964	$ 6,649,434
2000	Aug	$ 4,781,330	$ 4,480,216	$ 9,261,546
2000	Sep	$ 4,706,468	$ 4,179,979	$ 8,886,447
2000	Oct	$ 4,201,199	$ 4,786,303	$ 8,987,502
2000	Nov	$ 3,939,890	$ 4,339,456	$ 8,279,345
2000	Dec	$ 4,136,295	$ 3,532,986	$ 7,669,281
	Total	$ 50,093,869	$ 46,726,049	$ 96,819,919

No Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 4,679,337	$ 4,087,503	$ 8,766,839
2000	Feb	$ 3,450,447	$ 3,711,466	$ 7,161,913
2000	Mar	$ 3,417,984	$ 3,449,780	$ 6,867,765
2000	Apr	$ 3,969,809	$ 3,754,165	$ 7,723,974
2000	May	$ 4,129,394	$ 3,020,808	$ 7,150,203
2000	Jun	$ 4,547,229	$ 3,927,309	$ 8,474,538
2000	Jul	$ 3,405,554	$ 3,080,467	$ 6,486,021
2000	Aug	$ 4,598,029	$ 4,277,437	$ 8,875,467
2000	Sep	$ 4,588,281	$ 4,152,586	$ 8,740,867
2000	Oct	$ 4,060,651	$ 4,661,303	$ 8,721,954
2000	Nov	$ 3,744,905	$ 4,298,232	$ 8,043,136
2000	Dec	$ 4,023,263	$ 3,520,399	$ 7,543,662
	Total	$ 48,614,883	$ 45,941,456	$ 94,556,339

Results from the CLEC Plan on Real Data with Logs

Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,475,533	$ 5,300,023	$ 9,775,556
2000	Nov	$ 4,757,330	$ 4,924,324	$ 9,681,653
2000	Dec	$ 4,695,756	$ 4,078,302	$ 8,774,058
	Total	$ 50,634,054	$ 48,369,953	$ 99,004,007

Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,372,795	$ 5,170,322	$ 9,543,116
2000	Nov	$ 4,654,107	$ 4,884,769	$ 9,538,877
2000	Dec	$ 4,543,414	$ 3,887,470	$ 8,430,884
	Total	$ 49,763,343	$ 47,404,084	$ 97,167,427

No Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,618,196	$ 5,300,023	$ 9,918,220
2000	Nov	$ 4,898,140	$ 4,924,324	$ 9,822,463
2000	Dec	$ 4,821,681	$ 4,078,302	$ 8,899,983
	Total	$ 52,154,504	$ 48,369,953	

No Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,440,998	$ 5,170,322	$ 9,611,320
2000	Nov	$ 4,723,539	$ 4,884,769	$ 9,608,309

2000	Dec	$ 4,616,838	$ 3,887,470	$ 8,504,308
	Total	$ 50,567,441	$ 47,404,084	$ 97,971,525

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Results from the ORA Plan on Real Data without Logs

Year	Month	Mitigation and Conditional Failure	Mitigation and No Conditional Failure	No Mitigation and Conditional Failure
2000	Jan	$ 480,359	$ 480,359	$ 480,359
2000	Feb	$ 6,195,173	$ 6,195,173	$ 6,195,173
2000	Mar	$ 14,651,867	$ 14,651,867	$ 14,651,867
2000	Apr	$ 8,286,242	$ 8,286,242	$ 8,286,242
2000	May	$ 1,447,820	$ 1,447,820	$ 1,447,820
2000	Jun	$ 783,058	$ 783,058	$ 783,058
2000	Jul	$ 1,274,248	$ 1,274,248	$ 1,274,248
2000	Aug	$ 689,755	$ 689,755	$ 689,755
2000	Sep	$ 13,232,020	$ 13,232,020	$ 13,232,020
2000	Oct	$ 2,472,857	$ 2,472,857	$ 2,472,857
2000	Nov	$ 1,957,299	$ 1,957,299	$ 1,957,299
2000	Dec	$ 1,003,870	$ 1,003,870	$ 1,003,870
	Total	$ 52,474,567	$ 52,474,567	$ 52,474,567

Year	Month	No Mitigation and No Conditional Failure
2000	Jan	$ 480,359
2000	Feb	$ 6,195,173
2000	Mar	$ 14,651,867
2000	Apr	$ 8,286,242
2000	May	$ 1,447,820
2000	Jun	$ 783,058
2000	Jul	$ 1,274,248
2000	Aug	$ 689,755
2000	Sep	$ 13,232,020
2000	Oct	$ 2,472,857
2000	Nov	$ 1,957,299
2000	Dec	$ 1,003,870
	Total	$ 52,474,567

Results from the ORA Plan on Real Data with Logs

Year	Month	Mitigation and Conditional Failure	Mitigation and No Conditional Failure	No Mitigation and Conditional Failure
2000	Oct	$ 2,687,169	$ 2,687,169	$ 2,687,169
2000	Nov	$ 2,345,315	$ 2,345,315	$ 2,345,315
2000	Dec	$ 2,238,154	$ 2,238,154	$ 2,238,154
	Total	$ 54,311,179	$ 54,311,179	$ 54,311,179

Year	Month	No Mitigation and No Conditional Failure
2000	Oct	$ 2,687,169
2000	Nov	$ 2,345,315
2000	Dec	$ 2,238,154
	Total	$ 54,311,179

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Results from the Verizon Plan on Real Data without Logs

Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 239,916	$ 1,978	$ 241,894
2000	Feb	$ 6,576,514	$ 1,160	$ 6,577,674
2000	Mar	$ 2,499,795	$ 721	$ 2,500,516
2000	Apr	$ 1,548,027	$ 675	$ 1,548,702
2000	May	$ 297,482	$ 575	$ 298,057
2000	Jun	$ 699,323	$ 953	$ 700,276
2000	Jul	$ 414,511	$ 1,145	$ 415,656
2000	Aug	$ 3,546,966	$ 1,596	$ 3,548,562
2000	Sep	$ 1,107,414	$ 1,347	$ 1,108,761
2000	Oct	$ 4,918,657	$ 1,695	$ 4,920,352
2000	Nov	$ 911,677	$ 1,719	$ 913,396
2000	Dec	$ 753,999	$ 851	$ 754,850
	Total	$ 23,514,281	$ 14,414	$ 23,528,695

Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 239,916	$ 0	$ 239,916
2000	Feb	$ 6,576,514	$ 0	$ 6,576,514
2000	Mar	$ 2,499,795	$ 0	$ 2,499,795
2000	Apr	$ 1,548,027	$ 0	$ 1,548,027
2000	May	$ 297,482	$ 0	$ 297,482
2000	Jun	$ 699,323	$ 0	$ 699,323
2000	Jul	$ 414,511	$ 0	$ 414,511
2000	Aug	$ 3,546,966	$ 0	$ 3,546,966
2000	Sep	$ 1,107,414	$ 0	$ 1,107,414
2000	Oct	$ 4,918,657	$ 0	$ 4,918,657
2000	Nov	$ 911,677	$ 0	$ 911,677
2000	Dec	$ 753,999	$ 0	$ 753,999
	Total	$ 23,514,281	$ 0	$ 23,514,281

No Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 249,327	$ 1,978	$ 251,305
2000	Feb	$ 8,927,055	$ 1,160	$ 8,928,215
2000	Mar	$ 2,691,077	$ 721	$ 2,691,798
2000	Apr	$ 5,413,374	$ 675	$ 5,414,049
2000	May	$ 562,944	$ 575	$ 563,519
2000	Jun	$ 703,571	$ 953	$ 704,524
2000	Jul	$ 397,468	$ 1,145	$ 398,614
2000	Aug	$ 3,507,712	$ 1,596	$ 3,509,308
2000	Sep	$ 1,021,098	$ 1,347	$ 1,022,445
2000	Oct	$ 4,661,707	$ 1,695	$ 4,663,402
2000	Nov	$ 701,546	$ 1,719	$ 703,265
2000	Dec	$ 533,647	$ 851	$ 534,498
	Total	$ 29,370,526	$ 14,414	$ 29,384,940

No Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Jan	$ 249,327	$ 0	$ 249,327
2000	Feb	$ 8,927,055	$ 0	$ 8,927,055
2000	Mar	$ 2,691,077	$ 0	$ 2,691,077

2000	Apr	$ 5,413,374	$ 0	$ 5,413,374
2000	May	$ 562,944	$ 0	$ 562,944
2000	Jun	$ 703,571	$ 0	$ 703,571
2000	Jul	$ 397,468	$ 0	$ 397,468
2000	Aug	$ 3,507,712	$ 0	$ 3,507,712
2000	Sep	$ 1,021,098	$ 0	$ 1,021,098
2000	Oct	$ 4,661,707	$ 0	$ 4,661,707
2000	Nov	$ 701,546	$ 0	$ 701,546
2000	Dec	$ 533,647	$ 0	$ 533,647
	Total	$ 29,370,526	$ 0	$ 29,370,526

Results from the Verizon Plan on Real Data with Logs

Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,968,175	$ 1,772	$ 4,969,947
2000	Nov	$ 970,826	$ 1,875	$ 972,701
2000	Dec	$ 835,328	$ 1,237	$ 836,565
	Total	$ 23,704,276	$ 15,034	$ 23,719,311

Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,968,175	$ 0	$ 4,968,175
2000	Nov	$ 970,826	$ 0	$ 970,826
2000	Dec	$ 835,328	$ 0	$ 835,328
	Total	$ 23,704,276	$ 0	$ 23,704,276

No Mitigation and Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,727,610	$ 1,772	$ 4,729,382
2000	Nov	$ 694,587	$ 1,875	$ 696,462
2000	$	$ 1,237	$ 597,221	
Dec	595,984			
	Total	$ 29,491,807	$ 15,034	$ 29,506,841

No Mitigation and No Conditional Failure

Year	Month	Tier I	Tier II	Total
2000	Oct	$ 4,727,610	$ 0	$ 4,727,610
2000	Nov	$ 694,587	$ 0	$ 694,587
2000	Dec	$ 595,984	$ 0	$ 595,984
	Total	$ 29,491,807	$ 0	$ 29,491,807

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Results from Simulated Data

Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
Pacific	A	$ 10,486	$ 28	$ 10,514
	B	$ 145,775	$ 47,333	$ 193,108
	C	$ 772,194	$ 420,667	$ 1,192,861
	D	$ 5,905,283	$ 1,510,222	$ 7,415,506

Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
Pacific	A	$ 10 486	$ 0	$ 10,486

	B	$ 145,775	$ 0	$ 145,775
	C	$ 772,194	$ 0	$ 772,194
	D	$ 5,905,283	$ 0	$ 5,905,283

No Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
Pacific	A	$ 67,656	$ 1,167	$ 68,822
	B	$ 409,867	$ 74,000	$ 483,867
	C	$ 2,119,675	$ 462,222	$ 2,581,897
	D	$ 8,850,008	$ 1,538,667	$ 10,388,675

No Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
Pacific	A	$ 67,656	$ 0	$ 67,656
	B	$ 409,867	$ 0	$ 409,867
	C	$ 2,119,675	$ 0	$ 2,119,675
	D	$ 8,850,008	$ 0	$ 8,850,008

Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
CLEC	A	$ 2,672,580	$ 574,900	$ 3,247,479
	B	$ 7,282,435	$ 7,116,099	$ 14,398,534
	C	$ 12,289,368	$ 13,733,851	$ 26,023,218
	D	$ 22,509,064	$ 26,361,808	$ 48,870,872

Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
CLEC	A	$ 2,564,531	$ 528,879	$ 3,093,410
	B	$ 6,993,435	$ 6,988,307	$ 13,981,742
	C	$ 11,748,467	$ 13,258,808	$ 25,007,275
	D	$ 21,393,516	$ 25,674,070	$ 47,067,586

No Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
CLEC	A	$ 2,935,031	$ 574,900	$ 3,509,931
	B	$ 7,552,789	$ 7,116,099	$ 14,668,888
	C	$ 12,585,647	$ 13,733,851	$ 26,319,498
	D	$ 22,834,535	$ 26,361,808	$ 49,196,343

No Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
CLEC	A	$ 2,722,515	$ 528,879	$ 3,251,394
	B	$ 7,162,742	$ 6,988,307	$ 14,151,049
	C	$ 11,939,778	$ 13,258,808	$ 25,198,586
	D	$ 21,615,928	$ 25,674,070	$ 47,289,998

	Scenario	Mitigation and Conditional Failure	Mitigation and No Conditional Failure	No Mitigation and Conditional Failure	No Mitigation and No Conditional Failure
OR A	A	$ 65,329	$ 65,329	$ 65,329	$ 65,329
	B	$ 401,540	$ 401,540	$ 401,540	$ 401,540
	C	$ 639,355	$ 639,355	$ 639,355	$ 639,355
	D	$ 1,250,400	$ 1,250,400	$ 1,250,400	$ 1,250,400

Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
Verizon	A	$ 81,835	$ 0	$ 81,835
	B	$ 3,343,006	$ 3,603	$ 3,346,609
	C	$ 6,281,303	$ 7,656	$ 6,288,959
	D	$ 12,929,103	$ 14,697	$ 12,943,800

Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
Verizon	A	$ 81,835	$ 0	$ 81,835
	B	$ 3,343,006	$ 0	$ 3,343,006
	C	$ 6,281,303	$ 0	$ 6,281,303
	D	$ 12,929,103	$ 0	$ 12,929,103

No Mitigation and Conditional Failure

	Scenario	Tier I	Tier II	Total
Verizon	A	$ 200,591	$ 0	$ 200,591
	B	$ 2,355,210	$ 3,603	$ 2,358,813
	C	$ 4,507,864	$ 7,656	$ 4,515,520
	D	$ 8,535,089	$ 14,697	$ 8,549,786

No Mitigation and No Conditional Failure

	Scenario	Tier I	Tier II	Total
Verizon	A	$ 200,591	$ 0	$ 200,591
	B	$ 2,355,210	$ 0	$ 2,355,210
	C	$ 4,507,864	$ 0	$ 4,507,864
	D	$ 8,535,089	$ 0	$ 8,535,089

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Failure Rates by Scenario

Scenario	Miss	Chronic	Extended
A	7%	0.30%	0.02%
B	14%	5%	3%
C	23%	11%	8%
D	38%	21%	14%

Note:
Miss Average percentage of observations missed using a 10% alpha for parity measures and the Interim Decision rules for benchmarks
Chronic The percentage of observations missed for three (or more) consecutive months
Extended The percentage of observations missed for six (or more) consecutive months

[See Pacific Plan Monthly Payments Projected on Pacific's Year 2000 Performance Calculated Without Log Transformations in Original]

Note: The charts on this and following pages have different vertical scales for payment amounts. The payment amounts differ greatly between plans, and to illustrate each plan's month-to-month variability it was necessary to graph the results on separate charts. The percentage-failure scales on the right side of each graph are the same for all graphs.

[See Verizon Plan Monthly Payments Projected on Pacific's Year 2000 Performance Calculated Without Log Transformations in Original]

[See CLEC Plan Monthly Payments Projected on Pacific's Year 2000 Performance Calculated Without Log Transformations in Original]

[See ORA Plan Monthly Payments Projected on Pacific's Year 2000 Performance Calculated Without Log Transformations in Original]

Appendix C: ARMIS 43-01 Cost and Revenue Table

43-01: Table I: Cost and Revenue Table

Amounts are in thousands of dollars

Year	Company Name	Row_ #	Row_Title
1999	Pacific Bell - California	1090	Total Operating Revenues
1999	Pacific Bell - California	1190	Total Operating Expenses
1999	Pacific Bell - California	1290	Other Operating Income/Losses
1999	Pacific Bell - California	1390	Total Non-operating Items (Exp)
1999	Pacific Bell - California	1490	Total Other Taxes
1999	Pacific Bell - California	1590	Federal Income Taxes (Exp)
1999	Pacific Bell - California	1915	Net Return
1999	GTE/California	1090	Total Operating Revenues
1999	GTE/California	1190	Total Operating Expenses
1999	GTE/California	1290	Other Operating Income/Losses
1999	GTE/California	1390	Total Non-operating Items (Exp)
1999	GTE/California	1490	Total Other Taxes
1999	GTE/California	1590	Federal Income Taxes (Exp)
1999	GTE/California	1915	Net Return
2000	Pacific Bell - California	1090	Total Operating Revenues
2000	Pacific Bell - California	1190	Total Operating Expenses
2000	Pacific Bell - California	1290	Other Operating Income/Losses
2000	Pacific Bell - California	1390	Total Non-operating Items (Exp)
2000	Pacific Bell - California	1490	Total Other Taxes
2000	Pacific Bell - California	1590	Federal Income Taxes (Exp)
2000	Pacific Bell - California	1915	Net Return
2000	GTE/California	1090	Total Operating Revenues
2000	GTE/California	1190	Total Operating Expenses
2000	GTE/California	1290	Other Operating Income/Losses
2000	GTE/California	1390	Total Non-operating Items (Exp)
2000	GTE/California	1490	Total Other Taxes
2000	GTE/California	1590	Federal Income Taxes (Exp)
2000	GTE/California	1915	Net Return

Year	Company Name	State	Interstate	Total
1999	Pacific Bell - California	6756623	2224451	
1999	Pacific Bell - California	4966092	1420923	
1999	Pacific Bell - California	7129	1990	
1999	Pacific Bell - California	462168	-4596	
1999	Pacific Bell - California	241580	106806	
1999	Pacific Bell - California	239303	205737	
1999	Pacific Bell - California	854609	497572	1352181
1999	GTE/California	2136807	619986	
1999	GTE/California	1316914	337785	
1999	GTE/California	297	82	
1999	GTE/California	62015	427	
1999	GTE/California	94807	32679	
1999	GTE/California	198151	78216	
1999	GTE/California	465217	170961	636178
2000	Pacific Bell - California	6819557	2424598	
2000	Pacific Bell - California	4832501	1533942	
2000	Pacific Bell - California	848	285	

2000	Pacific Bell - California	444109	-10272	
2000	Pacific Bell - California	265990	111167	
2000	Pacific Bell - California	308431	231478	
2000	Pacific Bell - California	969374	558568	1527942
2000	GTE/California	2036288	688796	
2000	GTE/California	1335789	336626	
2000	GTE/California	2014	570	
2000	GTE/California	295688	327	
2000	GTE/California	72279	41581	
2000	GTE/California	83803	100125	
2000	GTE/California	250743	210707	461450

Source: FCC website, http://www.fcc.gov/ccb/armis/db/ (except for shaded areas)

Data in shaded areas are CPUC staff calculations from table data. Net Return is calculated by adding rows 1090 and 1290 and subtracting rows 1190, 1390, 1490 and 1590.

Appendix D

Appendix D: Verizon's Illustrations

This appendix contains graphics created by Verizon with the intention of illustrating certain concepts. Their presentation here does not imply that the Commission necessarily agrees with these illustrations as adequate analogies for OSS processes. The analogies presented may be helpful in some contexts, but may be either inadequate and/or unhelpful in other contexts. They are presented here solely for the purpose of discussing Verizon's positions.

[See Verizon's page 27 illustration: in Original]

[See Verizon's page 26 illustration: in Original]

[See Verizon's page 25 illustration: in Original]

Appendix E: Payment Rate Guide

Failure rate "F"		Payment Rate "R"		
Equal to or greater than	But less than	Minimum Percent of Cap	Maximum Percent of Cap	Formula
0	1	0	0.2	R = 0.2 x F
0	2	0	0.4	
2	3	0.4	0.6	"
3	4	0.6	0.8	"
4	5	0.8	1	"
5	6	1	1.6	R = - 2.00 + 0.60 x F
6	7	1.6	2.2	"
7	8	2.2	2.8	"
8	9	2.8	3.4	"
9	10	3.4	4	"
10	11	4	5	R = - 6.00 + 1.00 x F
11	12	5	6	"
12	13	6	7	"
13	14	7	8	"
14	15	8	9	"
15	16	9	10.4	R = - 12.00 + 1.40 x F
16	17	10.4	11.8	"
17	18	11.8	13.2	"
18	19	13.2	14.6	"
19	20	14.6	16	"

20	21	16	18.8	R = - 40.00 + 2.80 x F
21	22	18.8	21.6	"
22	23	21.6	24.4	"
23	24	24.4	27.2	"
24	25	27.2	30	"
25	26	30	32.8	"
26	27	32.8	35.6	"
27	28	35.6	38.4	"
28	29	38.4	41.2	"
29	30	41.2	44	"
30	31	44	46.8	"
31	32	46.8	49.6	"
32	33	49.6	52.4	"
33	34	52.4	55.2	"
34	35	55.2	58	"
35	36	58	60.8	"
36	37	60.8	63.6	"
37	38	63.6	66.4	"
38	39	66.4	69.2	"
39	40	69.2	72	"
40	41	72	74.8	"
41	42	74.8	77.6	"
42	43	77.6	80.4	"
43	44	80.4	83.2	"
44	45	83.2	86	"
45	46	86	88.8	"
46	47	88.8	91.6	"
47	48	91.6	94.4	"
48	49	94.4	97.2	"
49	50	97.2	100	"
50	100	100	100	"

Appendix F: Individual Performance Result Payment Rate Examples

Payment Rate Examples

	Individual Payment Amounts			
Percentage of Failures *	Ordinary	Chronic	Extended	Tier II
0.0	0	0	0	0
1.0	40	200	400	800
5.0	200	1000	2000	4000
10.0	400	2000	4000	8000
20.0	800	4000	8000	16000
30.0	1200	6000	12000	24000
40.0	1600	8000	16000	32000
50.0	2000	10000	20000	40000
60.0	2000	10000	20000	40000
70.0	2000	10000	20000	40000
80.0	2000	10000	20000	40000
90.0	2000	10000	20000	40000
100.0	2000	10000	20000	40000
4.0	160	800	1600	3200
7.9	314	1570	3140	6280
16.0	640	3200	6400	12800
21.0	840	4200	8400	16800
31.0	1240	6200	12400	24800

41.0	1640	8200	16400	32800
50.0	2000	10000	20000	40000

* Tier I rates are based on Tier I failure rates, and Tier II rates are based on Tier II failure rates. The above examples are calculated using a $ 40 adjusted base amount.

For Pacific Bell — Adjusted base amount = $ 38

Example	Description		Failure Category Category A Ordinary	Chronic	Extended
A	Parity	Failure rate	3.96%	0.32%	0.05%
	Simulation	Payment	$ 34,632	$ 10,289	$ 2,935
B	Historical	Failure rate	5.70%	1.73%	1.08%
	Nov '01	Payment	$ 59,798	$ 92,876	$ 112,031
C	Historical	Failure rate	7.97%	3.22%	2.48%
	Mar '01	Payment	$ 116,111	$ 249,752	$ 395,198
D	Non-parity	Failure rate	9.25%	4.19%	3.27%
	Simulation	Payment	$ 138,886	$ 328,614	$ 589,004
E	Non-parity	Failure rate	16.62%	11.32%	10.62%
	Simulation	Payment	$ 402,615	$ 1,341,486	$ 2,512,747
F	Non-parity	Failure rate	24.75%	18.76%	17.86%
	Simulation	Payment	$ 880,387	$ 3,335,811	$ 6,381,528
G	Non-parity	Failure rate	30.04%	23.20%	22.05%
	Simulation	Payment	$ 1,282,418	$ 4,970,710	$ 9,487,648
H	Non-parity	Failure rate	41.13%	32.90%	31.35%
	Simulation	Payment	$ 2,359,661	$ 9,491,095	$ 18,143,435
I	Non-parity	Failure rate	44.55%	36.05%	34.41%
	Simulation	Payment	$ 2,765,803	$ 11,265,350	$ 21,543,108

For Pacific Bell — Monthly cap =

Example	Description	Failure Category Category B Ordinary	Chronic	Extended	Category C Ordinary	Chronic
A	Parity	1.41%	0.18%	0.00%	3.31%	0.77%
	Simulation	$ 921	$ 216	$ 0		$ 7,621
B	Historical	7.06%	3.53%	2.35%	8.12%	4.18%
	Nov '01	$ 11,859	$ 29,647	$ 39,529		$ 102,320
C	Historical	2.25%	2.25%	0.00%	10.80%	6.20%
	Mar '01	$ 1,393	$ 6,966	$ 0		$ 226,086
D	Non-parity	4.67%	3.77%	3.54%	13.24%	5.71%
	Simulation	$ 4,168	$ 16,543	$ 32,930		$ 221,652
E	Non-parity	9.88%	9.23%	8.79%	22.32%	14.15%
	Simulation	$ 18,106	$ 84,727	$ 166,422		$ 834,643
F	Non-parity	15.78%	15.38%	15.14%	29.33%	21.31%
	Simulation	$ 45,802	$ 222,535	$ 441,197		$ 1,830,714
G	Non-parity	24.25%	21.08%	18.17%	36.52%	28.76%
	Simulation	$ 107,893	$ 466,839	$ 799,929		$ 3,078,382
H	Non-parity	25.49%	24.80%	24.54%	48.45%	40.13%
	Simulation	$ 119,913	$ 576,116	$ 1,138,046		$ 5,714,018
I	Non-parity	29.10%	27.98%	27.72%	52.79%	44.29%
	Simulation	$ 156,099	$ 744,132	$ 1,470,891		$ 6,860,469

For Pacific Bell — $ 45,838,260 Total payment

Example	Description	Simulated or Historical	Target Amount
A	Parity		
	Simulation	$ 56,614	$ 363,039

B	Historical Nov '01	$ 448,061	$ 650,903
C	Historical Mar '01	$ 995,506	$ 1,275,220
D	Non-parity Simulation	$ 1,331,797	$ 1,627,258
E	Non-parity Simulation	$ 5,360,746	$ 5,165,055
F	Non-parity Simulation	$ 13,137,974	$ 13,430,610
G	Non-parity Simulation	$ 20,193,819	$ 20,220,173
H	Non-parity Simulation	$ 37,542,284	$ 34,453,870
I	Non-parity Simulation	$ 44,805,852	$ 38,702,160

[See Comparison of Simulated versus Targeted Percentage Payment of Total Payment Cap as a Function of Failure Rate Simulated Data from Pacific Bell November 2001 Results in Original]

Performance incentives plan projected on historical data - for analysis purposes

Month	Ordinary failure rate	Tier I Category A payments Ordinary	Chronic	Extended	Category B payments Ordinary	Chronic	Extended
Jan-00	8.99%	$ 151,627	$ 370,001	$ 511,935	$ 65,778	$ 137,037	$ 164,444
Feb-00	7.09%	$ 102,696	$ 211,792	$ 325,482	$ 19,942	$ 56,977	$ 85,465
Mar-00	6.09%	$ 68,691	$ 143,206	$ 206,966	$ 24,847	$ 46,588	$ 93,176
Apr-00	6.95%	$ 103,861	$ 159,408	$ 243,703	$ 39,759	$ 19,880	$ 39,759
May-00	6.78%	$ 86,850	$ 143,628	$ 184,168	$ 22,805	$ 14,253	$ 28,506
Jun-00	7.61%	$ 105,781	$ 183,612	$ 218,378	$ 29,541	$ 16,412	$ 32,824
Jul-00	6.52%	$ 89,749	$ 184,078	$ 214,484	$ 36,782	$ 36,782	$ 36,782
Aug-00	7.46%	$ 111,958	$ 206,621	$ 262,339	$ 40,333	$ 36,667	$ 73,333
Sep-00	7.33%	$ 99,138	$ 188,544	$ 267,541	$ 12,135	$ 20,225	$ 20,225
Oct-00	8.03%	$ 120,338	$ 238,883	$ 335,306	$ 40,787	$ 37,079	$ 37,079
Nov-00	9.70%	$ 159,892	$ 200,867	$ 296,576	$ 21,802	$ 27,253	$ 27,253
Dec-00	8.89%	$ 142,976	$ 248,613	$ 340,759	$ 22,756	$ 0	$ 0
Jan-01	8.53%	$ 134,922	$ 260,442	$ 319,208	$ 22,505	$ 28,132	$ 0
Feb-01	7.90%	$ 105,096	$ 212,279	$ 295,834	$ 8,889	$ 17,778	$ 0
Mar-01	7.97%	$ 116,111	$ 249,752	$ 395,198	$ 1,393	$ 6,966	$ 0
Apr-01	7.72%	$ 110,051	$ 172,226	$ 266,707	$ 21,565	$ 26,957	$ 26,957
May-01	6.66%	$ 73,288	$ 95,264	$ 137,160	$ 4,848	$ 12,121	$ 12,121
Jun-01	5.93%	$ 68,554	$ 44,530	$ 67,245	$ 3,176	$ 10,588	$ 0
Jul-01	5.46%	$ 61,563	$ 73,522	$ 44,098	$ 3,034	$ 10,112	$ 0
Aug-01	5.88%	$ 60,002	$ 86,307	$ 42,361	$ 21,091	$ 26,364	$ 52,727
Sep-01	5.86%	$ 62,844	$ 83,445	$ 93,289	$ 1,379	$ 3,448	$ 6,897
Oct-01	5.09%	$ 50,499	$ 101,185	$ 116,941	$ 15,966	$ 34,213	$ 45,618
Nov-01	5.70%	$ 59,798	$ 92,876	$ 112,031	$ 11,859	$ 29,647	$ 39,529

Performance incentives plan projected on historical data - for analysis purposes

Month	Tier II Category C payment	Total
Jan-00	$ 274,393	$ 1,675,215

Feb-00	$ 183,557	$ 985,911
Mar-00	$ 145,918	$ 729,393
Apr-00	$ 145,421	$ 751,790
May-00	$ 85,592	$ 565,801
Jun-00	$ 162,967	$ 749,515
Jul-00	$ 194,128	$ 792,784
Aug-00	$ 249,658	$ 980,908
Sep-00	$ 240,169	$ 847,976
Oct-00	$ 355,132	$ 1,164,604
Nov-00	$ 389,060	$ 1,122,703
Dec-00	$ 233,184	$ 988,288
Jan-01	$ 252,159	$ 1,017,368
Feb-01	$ 240,000	$ 879,876
Mar-01	$ 226,086	$ 995,507
Apr-01	$ 224,888	$ 849,350
May-01	$ 111,000	$ 445,803
Jun-01	$ 85,814	$ 279,908
Jul-01	$ 97,380	$ 289,710
Aug-01	$ 125,063	$ 413,914
Sep-01	$ 80,137	$ 331,440
Oct-01	$ 89,231	$ 453,653
Nov-01	$ 102,320	$ 448,061

Appendix H: Failure Rates and Payments in Texas and New York

[See Verizon New York Market Adjustment Summary Total Payment Amounts and Percent Missed Metrics in Original]

[See Payment Summary for Texas January 2000 through June 2001 in Original]

[See Tier II Payments and Metric Misses Summary for Texas January 2000 through June 2001 in Original]

Appendix I: Workpaper # 13, April 2, 2001, R.97-10-016/I.97-10-017.

This document was received as an e-mail. The "Sent" date is not correct, and is apparently an automatic-dating error.

Original Message
From: Faye Raynor [mailto:faye.raynor@telops.gte.com]
Sent: Wednesday, December 31, 1969 4:00 PM
To: jmgibson@newpointgroup.com; jar@cpuc.ca.gov
Cc: stephen.vivien@wcom.com; gsjohns@pacbell.com
Subject: Measures Excluded from Incentive Plan

The CLECs, Pacific Bell and GTE reached an agreement in mid-1999 that several of the performance measures included for reporting under the Stipulated Agreement were duplicative in nature and would not be subject to penalty assessment. This agreement was memorialized in 1) February technical workshops on incentives (PB/CLECs) and subsequent briefs filed March 22, 1999 and 2) the GTE/CLEC OSS Incentive Technical Workshop held July 13-14, 1999 and subsequent briefs. The measures with industry agreement identified for penalty exclusion were:

Measurement 8 - Percent Completed Within Standard Interval
Measurement 12 - Percent of Due Dates Missed Due To Lack of Facilities
Measurement 13 - Delay Order Interval to Completion Date (For Lack of Facilities)
Measurement 22 - POTS Out of Service Less than 24 Hours

Additionally, submeasures identified for exclusion were:

Measurement 3 - Error Types (Syntax and content)
Measurement 5 - Jeopardy Type (lack of facilities and other)
Measurement 6 - Jeopardy Type (lack of facilities and other)
Measurement 34 - Charge Type (Usage, Recurring, NonRecurring)

The Parties also agreed this list of excluded measurements is subject to review on a periodic basis after incentive plan implementation.

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Manager-Performance Measures Integration
972-718-8897

Appendix J: California Performance Incentives Plan

1. GENERAL PRINCIPLES

1.1 The Performance Incentive Plan (hereafter the *Incentive Plan*) consists of the following elements: (1) a collection of measures that assess service delivery; (2) a set of testing rules for deciding whether service delivery is in parity (where there are retail analogues) or in compliance (where there are benchmarks); (3) a mechanism for calculating incentive payments for those sub-measures found to be out of parity or out of compliance; (4) a specification of the payment amounts to be paid for out-of-parity or non-compliant performance; (5) a provision for Absolute and Procedural caps on payments; and (6) a provision for Root Cause analysis that can excuse service delivery failures that were outside the control of the Pacific Bell or Verizon.

1.2 **Performance Measures.** The performance measures used in the Incentive Plan are specified in the Performance Measurements Joint Partial Settlement Agreement (JPSA) as amended by D.01-05-087. Payments apply to those non-diagnostic sub-measures designated in Section 5 herein that have data for a given month when Pacific Bell or Verizon delivers out-of-parity or non-compliant performance.

1.3 **Testing Rules.** The rules for assessing whether specific sub-measures are out-of-parity or non-compliant are applied from Exhibit 3 attached to this plan.

1.4 **Incentive Payment Calculations.** Incentive payment calculations are applied to those performance results for each month that are deemed to be out-of-parity or non-compliant.

1.5 **Incentive Payment Amounts.** The size of the incentive payments depends on performance failure pervasiveness (that is, the number of performance failures affecting a CLEC), and whether performance failures are repeated. The incentive amounts increase as the number of performance failures increase or as they are repeated.

1.6 **Absolute and Procedural Caps.** In any month, the following caps on payments apply: (1) a procedural cap of $ 15,000,000 for Pacific Bell for all CLECs.; (2) a procedural cap of $ 4,500,000 for Verizon for all CLECs, and (3) an absolute monthly cap of 1/12 of 36% of annual net revenue from local exchange service for both Pacific Bell and Verizon. Using the same methodology that was used to determine these amounts, these amounts will be updated to reflect new ARMIS data published each year.

1.7 **Root Cause Analysis.** A procedure for Root Cause Analysis and subsequent action is included.

1.8 **Modifications.** The Commission shall retain authority to modify any element of this plan.

2. THE ASSESSMENT OF PARITY AND COMPLIANCE

2.1 The specific mechanism for assessing parity and compliance depends on the classification of the sub-measure being assessed. Sub-measures can be classified according to four dimensions: (1) the *type* of the comparison: parity where there is a retail analogue or benchmarks where no retail analogues are available or feasible, (2) the *basis* for the measurement: averages, percentages (proportions), rates, indices, or counts; (3) the *direction* of good service: either

high values or low values; and (4) the *applicability of aggregation rules*. The table below gives a summary of the tests that are applied to sub-measures according to their first two dimensions. These tests are described in more detail below.

2.2 **Statistical Criteria for Deciding Parity.**

2.2.1. A statistical test is applied that yields a probability of the data given the null hypothesis of parity. Except where different critical alpha levels are applied conditionally, a sub-measure will be deemed out of parity (i.e., the sub-measure *fails*) if the probability is less than 10% (0.10 critical alpha). Otherwise the sub-measure *passes*.

2.2.2. Under the following conditions, the sub-measure will be deemed out of parity if the probability is less than 20% (0.20 critical alpha level): (1) When sample sizes are less than 30 for single-month individual CLEC tests where the aggregate sub-measure test indicates non-parity, or (2) for all tests for repeated failures.

2.2.3. Under the following conditions, the sub-measure will be deemed out of parity if the probability is less than 5% (0.05 critical alpha level): (1) When sample sizes are 100 or greater for single-month individual CLEC tests where the aggregate sub-measure test indicates parity, or (2) when single-month sample sizes are 500 or greater.

2.2.4. A step-by-step application of the above critical alpha applications is provided in the Decision Model attached as Exhibit 3.

2.3. **Benchmarks.** Small sample adjustment tables shall be used for both individual CLEC tests and industry-aggregate tests.

2.4. Statistical tests shall be applied as specified in the Interim Opinion, D.01-01-037, unless otherwise specified herein. The test applications are summarized in the following table:

Testing Procedures Applied to Sub-measures
According to their Basis and Type

Basis	Parity	Benchmarks
Averages	Modified t-test applied to the logs of the data except for Measures 34 and 44 for which the test is applied to the raw data.	Benchmark is used as an absolute comparison standard
Percentage	Fisher's exact test applied to all sub-measures.	Small Sample Adjustment table is applied where applicable, otherwise the benchmark is used as an absolute standard.
Rates	Binomial test applied to all sub-measures	Small Sample Adjustment table is applied where applicable, otherwise the benchmark is used as an absolute standard.
Index	The performance difference is compared to an absolute standard	The performance is compared to an absolute standard
Count	No sub-measures of this kind	The CLEC numerator is compared to the benchmark as an absolute standard. Applicable to LNP sub-measures in Measures 20 and 23.

3. CALCULATION OF INCENTIVE VALUES

3.1 The assessment of incentive payments for non-compliance is performed in three ways: (1) on a CLEC-by-CLEC basis, each month, by examining all the sub-measures "touched" by an individual CLEC (hereafter the *portfolio of touched sub-measures*) that do not fall into the specialized categories discussed below, (2) on an industry aggregate basis, each month, for those sub-measures covering processes that only involve computer processing and are therefore designed to automatically provide parity (covered by Measures 1, 24, 38, 42, and 44, and the *fully-electronic* sub-measures of 2, 3, and 18), and (3) on an industry aggregate basis, each month, for those parity measures that have chronic conditional failures. The calculation and assessment of incentive amounts are different for each of these four categories of sub-measures. Categories A, and B are termed Tier I categories. Tier I payments are made to the CLECs. Category C is termed Tier II, and payments are made to the ratepayers. n2

3.2 A base amount (*BA*) of $ 38 will be used as a starting point for calculating Pacific Bell's payment amounts.

3.3 A base amount (*BA*) of $ 23 will be used as a starting point for calculating Verizon's payment amounts.

3.4 Actual payment amounts will be calculated using an adjusted base amount. The base amount (BA) will be adjusted according to the total number of observations (total number of sub-measure performance results for all CLECs) each month. The adjusted base amount (ABA) will be determined by the following formula: ABA = BA x (total number of observations listed for each ILEC in Appendix G / current total number of observations for each ILEC), rounded to the closest dollar. For example, if in a future month Pacific had a 5000 observation total, then the adjusted base amount would be $ 38 x (4243/5000) = $ 32.

3.5 Tier I incentive payments will be limited to an amount equal to the total amount that each CLEC pays for OSS and wholesale local exchange services. Any payment surplus amounts generated by Tier I payment mechanisms shall be added to Tier II payment amounts for distribution.

3.6 **Category A.** Includes all sub-measures for all incentive payment measures (specified in Section 5), except those included in Category B. In this category there is a portfolio of touched sub-measures for each CLEC. The following description applies to this portfolio for a single CLEC.

3.6.1 **Ordinary Failures.** To calculate payments for *Ordinary Failures*, the following steps are required for each CLEC.

3.6.1.1 Calculate the size of the portfolio of touched sub-measures for each CLEC. Those sub-measures that fall into Category B are excluded in calculating the size of the CLEC's portfolio of touched sub-measures.

3.6.1.2 Determine the CLEC's portfolio failure rate in percentage points by calculating its percentage of touched sub-measures that failed the statistical tests or benchmarks.

3.6.1.3 The amount paid to the CLEC for each failure is then determined by multiplying its *Ordinary Failure* rate percentage points by the adjusted base amount. (E.g., with a $ 40 adjusted base amount and a 12% *Ordinary Failure* rate: 12 x *ABA* = $ 480.)

3.6.2 **Chronic Failures.** Sub-measure failures that occur for three or more consecutive months are called *Chronic Failures*. The procedure for *Chronic Failures* is similar to that for Ordinary failures.

3.6.2.1 Determine the number of *Chronic Failures* for each CLEC.

3.6.2.2 The amount paid to the CLEC for each *Chronic Failure* is then determined by multiplying the *Ordinary Failure* payment amount by five (5). (E.g., with a $ 40 adjusted base amount and a 12% *Ordinary Failure* rate, 12 x $ 40 x 5 = $ 2400).

3.6.2.3 To identify *Chronic Failures* for the first two months of implementation, performance results from the CLEC's current month and two previous months will be used.

3.6.2.4 Except where there are three consecutive months of inactivity by a CLEC, the months immediately preceding and following these months without individual OSS sub-measure activity by that CLEC, will be considered consecutive months for the purposes of identifying *Chronic Failures*. Exception: Measures and sub-measures identified as having no minimum sample size will have no limit to the number of intervening months of inactivity that will be ingored for the purposes of determining *Chronic Failures*. See Exhibit 4.

3.6.3 **Extended Failures.** Sub-measure failures for five or six out of six consecutive months are called *Extended Failures*.

3.6.3.1 To identify *Extended Failures* for the first five months of implementation, performance results from the current month and the five previous months will be used.

3.6.3.2 The amount paid to the CLEC for each *Extended Failure* is determined by multiplying the *Ordinary Failure* payment amount by ten (10). (E.g., with a $ 40 adjusted base amount and a 12% *Ordinary Failure* rate, 12 x $ 40 x 10 = $ 4800).

3.6.3.3 Except where there are three consecutive months of inactivity by a CLEC, the months immediately preceding and following these months without individual OSS sub-measure activity by that CLEC, will be considered consecutive months for the purposes of identifying *Extended Failures*. Exception: Measures and sub-measures identified as having no minimum sample size will have no limit to the number of intervening months of inactivity that will be ingored for the purposes of determining *Extended Failures*. See Exhibit 4.

3.7 **Category B (Industry Aggregates).** All those sub-measures that fall under treatment as an Industry Aggregate are considered as a single portfolio. The procedure for determining incentive payments for this portfolio is as follows.

3.7.1 Calculate the size of the portfolio for the Industry Aggregates for:

3.7.1.1 Performance Measures 1, 16, 24, 38, 42, and 44 (all sub-measures except for manual processes in Measure 1).

3.7.1.2 Performance Measures 2 and 3, all sub-measures where orders are electronically received *and* electronically handled.

3.7.1.3 Performance Measure 18, Sub-measures 1800101 (LEX/EDI LASR), 180201 (LEX/EDI CLEO), 1800502 (LEX/EDI LASR -- not reported by DSS), and 1800503 (LEX/EDI CLEO -- not reported by DSS), only. Sub-measures 1800502 and 1800503 track additional conditions that must be met in order to pass 1800101 and 1800201, respectively, and are not assessed penalties independently.

3.7.2 Determine the number of failures.

3.7.3 The incentive amount is then determined by multiplying the failure rate percentage points by the adjusted base amount and then by 10 for the *Ordinary Failures*, 50 for *Chronic Failures* and 100 for *Extended Failures*.

3.7.4 The sum of all payments for Industry Aggregate sub-measures is divided equally among all CLECs eligible for incentive payments.

3.8 **Category C (Tier II).** Includes all sub-measures for all incentive payment measures (specified in Section 5). Each sub-measure is aggregated on an industry basis and the set of aggregated sub-measures is considered as a single portfolio. The aggregate sub-measures are tested using the same procedures as for individual CLEC tests. To create industry-aggregate performance results for the count-based sub-measures in Performance Measures 20 and 23, the average count over all CLECs shall be compared to the benchmarks.

3.8.1 Calculate the size of the portfolio for the Tier II Industry Aggregates.

3.8.2 Determine the number of Category C single-month failures.

3.8.3 Determine the failure rate percentage points. (E.g., 0.15 = 15 percent = 15 percentage points.)

3.8.4 Determine the number of sub-measures that have failed the current month and the previous two months.

3.8.5 The payment amount for each failed sub-measure is then determined by multiplying the Industry Aggregate single-month failure rate percentage points by the adjusted base amount (e.g., with a $ 40 base amount and a 15 percent failure rate: 15 x A*BA* = $ 600), and then by 25.

3.8.6 To identify Tier II failures for the first two months of implementation, performance results from the current month and the two previous months will be used.

3.8.7 Except where there are three consecutive months of inactivity, the months immediately preceding and following these months without CLEC aggregate OSS sub-measure activity will be considered consecutive months for the purposes of identifying Tier II failures. Exception: Measures and sub-measures identified as having no minimum sample size will have no limit to the number of intervening months of inactivity that will be ingored for the purposes of determining *Chronic Failures*. See Exhibit 4.

3.8.8 Payments calculated for this category are paid to the ratepayers as follows:

3.8.8.1 Pacific and Verizon shall deposit Tier II incentive payments monthly into an interest-bearing memorandum account with a monthly-compounded interest rate equal to the tariffed rate the respective ILEC's charge their customers for late payment.

3.8.8.2 Each ILEC shall be responsible for maintaining these performance incentive accounts, which will be subject to audit by Commission staff.

3.8.8.3 When the annual Price Cap filings are made and the surcharge and surcredit amounts are calculated, the most recent twelve-month's incentive payments (August of the previous year through July of the current year) shall be added to the surcredit amounts included in Pacific's Rule 33 (Schedule Cal. P.U.C. No. A2.1.33) and Verizon's Tariff 38 (Schedule Cal. P.U.C. No. 38) disbursement mechanisms.

3.8.8.4 Interest shall accrue beginning with the first monthly incentive payment due date and shall continue to accrue on all amounts not yet credited to the ratepayers.

3.8.8.5 Pacific Bell shall identify in its Intrastate Earnings Monitoring Report (IEMR), NRF monitoring report code PD-01-27, an adjustment clearly identifying the annual performance incentive payments. This adjustment shall remove from the California intrastate results of operations, and the earnings monitoring reports, the payments made to the memorandum account.

3.8.8.6 Verizon shall identify in its Recorded and Adjusted Separated Results of Operations Report, NRF monitoring report code GD-04-01, an adjustment clearly identifying the annual performance incentive payments. This adjustment shall remove from the California intrastate results of operations, and the earnings monitoring reports, the payments made to the memorandum account.

3.9 **Payment reduction.** When the conditions in both of the following sub-paragraphs are met, $ 60,000 shall be deducted from the total payment amount. Any amounts in excess of the $ 60,000 shall be disbursed through Tier II mechanisms.

3.9.1 All Category A, B, and C failure rates are less than or equal to the following respective rates

Category A:
Ordinary Failures 4.0 percent
Chronic Failures 0.33 percent
Extended Failures 0.062 percent
Category B:

Ordinary Failures 1.7 percent
Chronic Failures 0.2 percent
Extended Failures 0.0 percent
Category C:
Ordinary Failures 3.4 percent
Chronic Failures 0.85 percent

3.9.2 None of the measures or sub-measures listed in Exhibit 4 have chronic or extended failures.

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n2 In prior drafts of this plan, Categories A, B, and C were designated Categories 1, 3, and 4, respectively. The category designated Category 2 in prior drafts is not used in this plan.

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4. SPECIFIC MEASURES TO WHICH INCENTIVE PAYMENTS APPLY

4.1 Payments for Pacific Bell's failure to meet specified performance measures will only apply to the Specified Measures listed below:

4.2 **Pre-Ordering**

Measure 1-Average Response Time (to Pre-Order Queries)

4.3 **Ordering**

Measure 2 - Average FOC Notice Interval

Measure 3 - Average Reject Notice Interval

. For Measure 3, remedies will be paid on the service group type disaggregations only. Error type levels of disaggregation will be reported diagnostically, and not subject to incentive payments.

Measure 4 - Percentage of Flow Through (once measures of success are ordered for this measure by the Commission)

4.4 **Provisioning**

Measure 5 - Percentage of Orders Jeopardized

Measure 6 - Average Jeopardy Notice Interval
Measure 7 - Average Completed Interval

Measure 9 - Coordinated Customer Conversion as a Percentage On-Time

Measure 9A - Frame Due Time Conversions as a Percentage On-Time

Measure 10 -LNP Network Provisioning

Measure 11 - Percent of Due Dates Missed

Measure 14 - Held Order Interval

Measure 15 - Provisioning Trouble Reports (Prior to Service Order Completion)

Measure 16 - Percent Troubles in 30 Days for New Orders (Specials)

Measure 17 - Percent Troubles in 10 Days for New Orders (Non-Specials)

Measure 18 - Average Completion Notice Interval

4.5 **Maintenance**

Measure 19 - Customer Trouble Report Rate

Measure 20 - Percent of Customer Trouble Not Resolved Within Estimated Time

Measure 21 - Average Time to Restore

Measure 23 - Frequency of Repeat Troubles in 30 Day Period

4.6 **Network Performance**

Measure 24 - Percent Blocking on Common Trunks

Measure 25 - Percent Blocking on Interconnection Trunks

Measure 26 - NXX Loaded by LERG Effective Date

4.7 **Billing**

Measure 28 - Usage Timeliness

Measure 29 - Accuracy of Usage Feed

Measure 30 - Wholesale Bill Timeliness

Measure 31 - Usage Completeness

Measure 32 - Recurring Charge Completeness

Measure 33 - Non-Recurring Charge Completeness

Measure 34 - Bill Accuracy

. For Measure 34, incentive payments will be paid on the service group type disaggregations only. Charge types will be reported diagnostically, and will be not subject to incentive payments.

Measure 35 - Billing Completion Notice Interval

Measure 36 - Accuracy of Mechanized Bill Feed

4.8 **Database Updates**

Measure 37 - Average Database Update Interval

Measure 38 - Percent Database Accuracy

Measure 39 - E911/911 MS Database Update Average

4.9 **Collocation**

Measure 40 - Average Time to Respond to a Collocation Request

Measure 41 - Average Time to Provide a Collocation Arrangement

4.10 **Interfaces**

Measure 42 - Percentage of Time Interface is Available

Measure 44 - Center Responsiveness

5. ROOT CAUSE ANALYSIS

5.1 Pacific Bell may use Root Cause Analysis to demonstrate that an apparent out-of-parity condition was attributable to an atypical event beyond the reasonable control of Pacific Bell. The list of "excludable events" that could be considered as part of Pacific Bell's Root Cause Analysis is reflected in Exhibit 1 hereto. In addition, the following provisions apply to Root Cause Analysis:

5.2 Where performance data suggests an out-of-parity condition exists, Pacific Bell may use Root Cause Analysis to demonstrate there was no discriminatory treatment (the situations in which Pacific Bell may invoke Root Cause Analysis -- referred to as "excludable events" -- are reflected in Exhibit 1). When Root Cause Analysis is invoked, Pacific Bell will have the burden of proving that but for the occurrence and nature of an "exclusion event" Pacific Bell would have succeeded on the measure in question.

5.3 If a dispute arises over whether Pacific Bell's Root Cause Analysis is sufficient to excuse an apparent out-of-parity condition, the Parties will first attempt to resolve the disagreement through an informal discussion. Pacific Bell will prepare a Root Cause Analysis report and provide it to any affected CLEC. If the Parties agree that the Root Cause Analysis report is sufficient to excuse Pacific Bell, the Parties will sign the report and Pacific Bell will be relieved from any associated payments. If CLEC does not accept Pacific Bell's Root Cause Analysis, the Parties agree to seek resolution by the Commission.

5.4 Pending the resolution of any dispute, Pacific Bell shall place the payments in an interest-bearing escrow account. The funds in question will be transferred to the CLEC when and if it is determined through the EDR process that Pacific's Root Cause Analysis is not sufficient to excuse Pacific Bell.

5.5 Exhibit 1 identifies the categories of events that may form the basis of Root Cause Analysis and provides examples of the types of events within each category. The list is only illustrative; it is not definitive.

5.6 Force majeure events will be treated as excludable events.

5.7 Pacific Bell will provide to the CLEC, at the time of submitting a Root Cause Analysis report to the CLEC, all non-confidential documents that were used as part of Pacific Bell's Root Cause Analysis.

5.8 Inadequate forecasts shall also be treated as an excludable event. Pacific Bell may demonstrate as part of its Root Cause Analysis that but for the inadequate forecast provided by CLEC, Pacific Bell would have complied with the performance measure at issue. Exhibit 2 hereto provides the terms of the forecasting exclusion.

5.9 Delays or other problems resulting from actions of a Service Bureau Provider acting on the CLEC's behalf for connection to Pacific Bell's OSS, including Service Bureau Provider provided processes, services, systems or connectivity shall be treated as excludable events.

6 PERFORMANCE INCENTIVE PAYMENTS

6.1 Payments/Credits

6.1.1 Schedule. Pacific Bell will provide billing credits for the incentive amounts generated by the plan, on or before the 30th day following the due date of the performance report for the month in which the obligation arose.

6.1.2 Absolute and Procedural Caps. In any given month, the payment to CLECs shall not exceed the following amounts. When the limit is reached, payments shall be prorated among the CLECs in the amounts proportional to what they would otherwise be entitled to collect absent a cap: 1) a procedural cap of $ 15,000,000 (Pacific) and $ 4,500,000 (Verizon) for all CLECs; 2) an absolute cap of 1/12 of 36% of annual net revenue from local exchange service. If a procedural cap is reached in a month, the Commission should conduct a hearing to determine whether it would be reasonable under the circumstances, and in light of the evidence, to require Pacific to pay any amounts in excess of the procedural caps. If the procedural cap is met, the amounts owed up to the cap will be prorated among the CLECs to whom incentive payments are owed and will be paid regardless of the outcome of the hearing.

6.1.3 Eligibility. Only CLECs who have submitted orders for services to Pacific during the month under report shall be eligible for incentive payments.

7. Clarifications and illustrations to aid performance incentive plan implementation.

General Issues.

Application of the Small Sample Adjustment Table to sub-measures where low values are associated with good service is done by subtracting the benchmark from 1 and using the result as the point of entry into the table.

The Small Sample Adjustment table is applied to aggregates as well as CLEC observations.

Aggregations of Count-based sub-measures are evaluated by comparing the average of the numerators for all the CLECs in the aggregation to the benchmark for the sub-measure.

The following definitions are used throughout:

An *Observation* is the data for a single CLEC on a sub-measure in a single month. An *Aggregate* is any collection of observations within a given sub-measure in a single month.

A *Single-month evaluation* is a pass/fail test on an observation or an aggregate using the single-month evaluation rules given in Exhibit 3, section B.

A *Repeated Failures evaluation* is a pass/fail test on an observation or aggregate using the repeated failures evaluation rules given in Exhibit 3, section B.

An *Ordinary Failure* is a failure determined using a single-month evaluation.

A *Chronic Failure* is an observation or aggregate failure that is determined using the repeated failures evaluation and is at least the third in a string of consecutive months of repeated failures (allowing for months with inactivity). Once a sub-measure has a chronic failure, all subsequent failures using the repeated failures critical alpha criterion will be deemed chronic until two consecutive passes are obtained or three months intervene with no activity.

An *Extended Failure* is an observation or aggregate failure that is determined using the repeated failures evaluation and that is preceded by at least five repeated failures in the preceding six months of tests (allowing for months with inactivity) Once a sub-measure has an extended chronic failure, all subsequent failures using the repeated failures critical alpha criterion will be deemed extended chronic until two consecutive passes are obtained or three months intervene with no activity.

The denominator used to calculate the Adjusted Base Amount is taken as the total number of remedy-relevant observations for those CLECs having reportable data for the month. The aggregate measures, 24, 42, and 44, contribute just the number of sub-measures with data.

The following formulae specify how payments are calculated in each category

General Parameters.

M = the number of remedy-relevant observations in the month.

K = 4243 / M

ABA = $ 38 x K (rounded to the nearest dollar).

Category A.

N(A) = the number of observations for a CLEC in a month excluding Category B sub-measures.

FO(A) = the number of ordinary failures for the CLEC.

FC(A) = the number of chronic failures for the CLEC.

FE(A) = the number of extended chronic failures for the CLEC.

P(A) = 100 x FO(A) / N(A)

PPM(A) = ABA x P(A) (pay-per-miss amount)

PO(A) = PPM(A) x FO(A) (payment for ordinary failures)

PC(A) = PPM(A) x FC(A) x 5 (payment for chronic failures)

PE(A) = PPM(A) x FE(A) x 10 (payment for extended chronic failures)

Category B.

N(B) = the number of Industry Aggregate sub-measures falling in Category B.

FO(B) = the number of ordinary failures for Category B.

FC(B) = the number of chronic failures for Category B.

FE(B) = the number of extended chronic failures for Category B.

P(B) = 100 x FO(B) / N(B)

PPM(B) = ABA x P(B) (pay-per-miss amount)

PO(B) = PPM(B) x FO(B) x 10 (payment for ordinary failures)

PC(B) = PPM(B) x FC(B) x 50 (payment for chronic failures)

PE(B) = PPM(B) x FE(B) x 100 (payment for extended chronic failures)

Category C.

N(C) = the number of Aggregate sub-measures falling in Category C.

FO(C) = the number of ordinary failures for Category C.

FC(C) = the number of chronic failures for Category C.

P(C) = 100 x FO(C) / N(C)

PPM(C) = ABA x P(C) (pay-per-miss amount)

PC(C) = PPM(C) x FC(C) x 25 (payment for chronic failures)

Special Issues.

The CLECs qualifying for Category B incentive payments are those that touch sub-measures in Measure 2, 3, and 40.

Category C is applied to all sub-measures.

The Category C failure rate is determined by the number of single-month failures in the month in question.

The rules for entering and leaving the chronic state (there is no extended chronic state) are the same as those for the other categories.

EXHIBIT 1

FACTUAL ANALYSIS

The following incidences are reasonable exceptions that can be used to mitigate a statistical finding of out-of-parity (or benchmark miss) provided that the incident impacted the CLEC to such a degree as to make otherwise compliant performance non-compliant:

I. Significant activity by a third party external to Pacific Bell* (not controllable by Pacific Bell)

A. Damage to facilities:

. major cable cuts

. gas/water main break

. manhole/structure fire

. central office/facilities fires not caused or under control of Pacific Bell

. other damage to facilities cause by a third party

B. Failure of third party systems

. LNP-service degradation/out-of-service of NPAC

C. Threats to personal safety

. Bomb threat causing evacuation of a Pacific Bell building (service center, central office, etc.)

. Other threats to personal safety which impact the execution of Pacific Bell's activities on behalf of the CLEC

II. Environmental events not considered force majeure

A. Environmental events causing service center evacuation/building condemnation

. building fire

. building damage cause by external force

. hazardous condition (gas or chemical leaks, presence of hazardous material)

III. Failure of CLEC process/system or those of a third party vendor, including a Service Bureau Provider, acting on behalf of CLEC

A. CLEC ordering system with degraded service or out-of-service for an extended period of time, resulting in:

. a backlog of requests sent all at once

. the CLEC changing from electronic transmission to manual (fax) for duration of the outage

B. Chronic, severely impaired testing capabilities on part of CLECs

C. Chronic failure on the part of the CLEC to provision their own network in a timely manner in establishing new or migrated end user service which also involves activities on the part of Pacific

*Note: Pacific Bell's sub-contractors or other Pacific Bell agents are not considered an external third party.

EXHIBIT 2

FORECASTING PLAN

CLECs shall submit forecasts to Pacific Bell for the following categories of products/services:

. Collocation

. Interconnection Trunks

. Service Requests by:

. Resale

. Non-designed

. Designed

. UNE

. Loops

. Non-designed

. Designed

. Loop/Port Combinations

. Unbundled Transport

. Forecasts shall cover a six-month period (two quarters) and shall be submitted one quarter in advance of the commencement of the six-month period.

. Forecasts may be updated quarterly, or sooner, if the CLEC determines that conditions warrant an update.

. For example, a forecast of 3rd and 4th Quarter 2001 must be submitted by March 31, 2001. However, the 4th Quarter forecast may be updated as part of the quarterly submission on or before June 30, 2001 (which covers 4th Quarter 2001 and 1st Quarter 2002).

. For Service Request forecasts, forecasts shall be submitted on a statewide basis. For Interconnection forecasts, forecasts shall be submitted by wire center. Tandem interconnection shall be by tandem with identification of estimated traffic to and from subtending end offices.

. For collocation, forecasts shall be submitted by wire center.

. Forecasts shall be disaggregated on a monthly level.

. If Pacific Bell misses a mapped sub-measure (see Exhibit 2) for which a CLEC's actual volumes are 20% greater than the forecasted volume, on a monthly basis, a root cause analysis may be triggered.

. If Pacific Bell misses a mapped sub-measure (see Exhibit 2) for which the CLEC has not provided any forecast, a root cause analysis may be triggered.

. Pacific Bell may address the effect on Pacific Bell of an inaccurate forecast in its limited root cause analysis of a missed mapped sub-measure. In this review, Pacific must document how, but for the variance in the CLEC's forecast and actual volumes for one of the categories above (i.e., service requests, interconnection trunks or collocation), Pacific Bell would not have missed the mapped sub-measure. For purposes of the limited root cause analysis, the performance measures potentially affected by forecasting are set forth, or mapped, on the attached chart.

. Forecasts may contain commercially sensitive information and must be kept confidential. Pacific shall protect forecasts against disclosure to any unauthorized persons, including personnel responsible for retail sales or marketing. In addition, Pacific shall limit the disclosure of CLEC forecasts to personnel with a need to know for the purpose of ensuring Pacific's compliance with OSS performance measures and their applicable incentive plan, including compliance with the underlying wholesale obligations.

FORECAST MAPPING TO PERFORMANCE MEASURES

	TYPE OF FORECAST		
	Service Order	Collocation	Interconnection
Pre-Ordering			
. 1 - Av. Response Time	X		
Ordering			
. 2 - Av. FOC Notice Interval	X		X
. 3 - Av. Reject Notice Interval	X		X
Provisioning			
. 5 - Percent of Orders Jeopardized	X		X
. 6 - Av. Jeopardy Notice Interval	X		X
. 7 - Av. Completed Interval			
. 9 - Coordinated Customer Conversions	X		
. 9A - Frame Due			

Time Customer Conversions		
. 10 - PNP Network Provisioning		
. 11 - Percent of Due Dates Missed		
. 14 - Held Order Interval		
. 15 - Provisioning Trouble Reports		
. 16 - Percent Troubles in 30 Days for New Orders	X	X
. 18 - Av. Comp. Notice Interval		
Maintenance		
. 19 - Customer Trouble Report Rate		
. 20 - Percent of Customer Trouble not Resolved within Est. Time		
. 21 - Av. Time to Restore		
. 23- Frequency of Repeat Troubles in 30 day period		
Network Performance		
. 24 - Percent Blocking on Common Trunks		
. 25 - Percent Blocking on Interconnection Trunks		X
. 26 - NXX Loaded by LERG Effective Date		
Billing		
. 28 - Usage Timeliness		
. 29 - Accuracy of Usage Feed		
. 30 - Wholesale Bill Timeliness		
. 31 - Usage Completeness	X	X
. 32 - Recurring Charge Completeness	X	X
. 33 - Non-recurring Charge Completeness	X	X

. 34 - Bill Accuracy		
. 35 - Billing Notice Completion Interval		
. 36 - Accuracy of Mech. Bill Feed		
Database Updates		
. 37 - Av. Database Update Interval	X	
. 38 - Percent Database Accuracy		
. 39 - E911/911 MS Database Update Interval		
Collocation		
. 40 - Av. Time to Respond to Collocation Requests		X
. 41 Av. Time to Provide a Collocation Arrangement		X
Interfaces		
. 42 - Percent of Time Interface is Available		
. 44 - Center Responsiveness		

Exhibit 3

Decision Model

Revised from D.01-01-037, Appendix C

I. Parity measures

A. Statistical Tests

All statistical tests will be one-tailed tests.

1. Average-based Parity Measures

The Modified *t*-test will be used for all average-based parity measures as specified in:

Brownie, C., Boos, D., & Hughes-Oliver, J. (1990). Modifying the t and ANOVA F tests when treatment is expected to increase variability relative to controls. *Biometrics, 46*, 259-266.

The Modified *t*-test for the difference in means (averages) between the ILEC and the CLEC populations is:

t = (M[i]-M[c])/[S[i]*sqrt(1/N[c]+1/N[i])]

Where:

M[c] = the CLEC mean result

M[i] = the ILEC mean result
S[i] = the standard deviation of the results for the ILEC
N[c] = the CLEC sample size
N[i] = the ILEC sample size
sqrt = square root

For measures of time intervals, the raw score distribution will be normalized by taking the natural log of each score after a constant of 0.4 of the smallest unit of measurement is added to each score. For example, if the smallest unit of measurement is an integer, then the added constant would be 0.4:

x[tran] = ln(x + 0.4)

Similarly, if the smallest unit of measurement is 0.01, then the added constant would be 0.004:

x[tran] = ln(x + 0.004)

Results that are not measures of time intervals (e.g., Measure 34) will not be transformed. Results for Measure 44 will not be transformed.

The Modified *t*-test calculation for average parity measures will be structured so that a negative sign indicates "worst" performance. Specifically, when a lower value represents better performance, such as time to provision a service, the CLEC mean will be subtracted from the ILEC mean. Different performance measures may require reversing the means in the equation to have a negative sign indicate poorer performance.

The *t*-statistic will be converted to a p-value (probability value) using a *t*-distribution table or calculation. Degrees of freedom (*df*) will be based only on the ILEC sample size consistent with Brownie, et al. If the obtained p-value is less than the critical alpha ([alpha]) value, then the result will be deemed not in parity.

2. Proportion Parity Measures

The Fisher's Exact Test will be used for all percentage or proportion parity measures as specified in:

Sheskin, D. (1997). *Handbook of parametric and nonparametric statistical procedures.* Boca Raton: CRC Press, pp. 221-225.

If the obtained p-value is less than the critical [alpha] value, then the result will be deemed out-of-parity.

3. Rate-based Parity Measures

The Binomial Exact Test will be used for all rate parity measures. The Binomial Exact Test is specified in GTECs Exhibit C, Section 3, "Permutation Test for Rates", Equations 3.1 and 3.2 (Deliverable # 7, Facilitated Work Group, April 2000).

4. Indexed-based Parity Measures

Measure 42 provides an index of parity performance that will be assessed by comparing ILEC and CLEC performance as follows:

Non-parity will be identified when the ILEC percentage minus the CLEC percentage exceeds 0.05 percentage points.

B. Critical Alpha Level for Parity Tests

The p-values obtained from the parity statistical tests will be compared to the critical alpha values as specified below. A performance result with a p-value less than the critical alpha will be deemed a performance failure. The critical alphas to be applied are listed below:

For Tier I:
Examine the single-month industry aggregate using:
. 0.10 for sample sizes of 1 to 499.
. 0.05 for sample sizes of 500 and greater.

For CLEC-level analyses:
For multiple-month tests:
. Use 0.20 for the test for each and every individual month (i.e., Chronic: months 1, 2, and 3. Extended: months 1, 2, 3, 4, 5, and 6).
For single-month tests:
If the industry aggregate fails:
. For each CLEC with a sample size of 1 to 29 use 0.20.
. For each CLEC with a sample size of 30 to 499 use 0.10.
. For each CLEC with a sample size of 500 or greater, use 0.05.
If the industry aggregate passes:
. For each CLEC with a sample size of 1 to 99 use 0.10.
. For each CLEC with a sample size of 100 or greater, use 0.05.

For Tier II:
Since all Tier II tests are repeated failure tests, use 0.20 for the test for each and every individual month (i.e., months 1, 2, and 3). (Note: the single-month aggregate failure rate used as a multiplier for calculating the payment amounts will follow the single-month industry aggregate test rules listed above.)

C. Sample Sizes and Aggregation Rules

Statistical tests will be applied to the monthly performance results specified in the Joint Partial Settlement Agreement (D.01-05-087 or "JPSA") and in any Commission-approve modifications to the JPSA. Statistical analyses and decision rules will be applied to determine performance subject to the performance incentives plan for all samples regardless of sample size.

D. Measures without Retail Analogues.

In months where there are no retail analogue performance data, the prior six months of ILEC data be aggregated (to the extent that such data exist) and used in place of the data-deficient month. If the aggregate does not produce sufficient ILEC data, the sub-measure will not be evaluated for the month.

II. Benchmark Measures

For large samples, the actual performance will be compared to the benchmark nominal percentage according to the percentage set in the Joint Partial Settlement Agreement approved by the Commission. For small samples, maximum permitted "misses" shall be determined by small sample adjustment tables. Small samples are defined as follows:

90 percent benchmarks - 50 cases or less
95 percent benchmarks - 100 cases or less
98 percent benchmarks -- 250 cases or less
99 percent benchmarks - 500 cases or less
99.65 (and 0.0035) percent benchmarks -- 1429 cases or less
99.75 (and 0.0025) percent benchmarks -- 2000 cases or less

SMALL SAMPLE ADJUSTMENT TABLES

	Benchmark = 90%		Benchmark = 95%		Benchmark = 98%		Benchmark = 99%	
Maximum Permitted Misses	Minimum Sample Size	Maximum Sample Size	Minimum Sample Size	Maximum Sample Size	Minimum Sample Size	Maximum Sample Size	Minimum Sample Size	Maximum Sample Size
0	1	1	1	3	1	9	1	19
1	2	9	4	19	10	48	20	97
2	10	20	20	40	49	101	98	202
3	21	31	41	63	102	159	203	319
4	32	44	64	88	160	222	320	445
5	45	50	89	100	223	250	446	500

	Benchmark = 99.65%		Benchmark = 99.75%	
Maximum Permitted Misses	Minimum Sample Size	Maximum Sample Size	Minimum Sample Size	Maximum Sample Size
0	1	55	1	77
1	56	304	78	390
2	305	631	391	808
3	632	999	809	1279
4	1000	1393	1280	1783
5	1394	1429	1784	2000

The small sample adjustment tables shall be used in the following steps:

1. The number of performance "misses" for the CLEC industry-wide aggregate for each remedy plan benchmark sub-measure will be compared to the number of permitted misses for all sample sizes covered by the related adjustment table. Industry aggregate performance will be identified as passing if the number of actual misses is less than or equal to the number of permitted misses, and identified as failing if otherwise.

2. For CLEC industry-wide aggregate sample sizes not covered by the related adjustment table, the actual performance percentage result will be compared to the benchmark nominal percentage value. Industry aggregate performance will be identified as passing if the actual performance percentage result is greater than or equal to the benchmark nominal percentage value, and identified as failing if otherwise.

3. For each sub-measure where the CLEC industry-wide aggregate performance *fails* the benchmark, the actual performance percentage result for each non-aggregated CLEC result will be compared to the benchmark nominal percentage value. Each individual performance result will be identified as passing if the actual performance percentage result is greater than or equal to the benchmark nominal percentage value, and identified as failing if otherwise.

4. For sample sizes *covered* by the related adjustment table where the CLEC industry-wide aggregate performance *passes* the benchmark, the following shall apply for each sub-measure. For each benchmark sub-measure, the number of performance "misses" for each non-aggregated CLEC will be compared to the number of permitted misses. CLEC performance will be identified as passing if the number of actual misses is less than or equal to the number of permitted misses, and identified as failing if otherwise.

5. For sample sizes *not covered* by the related adjustment table where the CLEC industry-wide aggregate performance *passes* the benchmark, the following shall apply. The actual performance percentage result for each non-aggregated CLEC result will be compared to the benchmark nominal percentage value. Each individual performance result will be identified as passing if the actual performance percentage result is greater than or equal to the benchmark nominal percentage value, and identified as failing if otherwise.

Small Sample Adjustment Table Calculation Procedure

1. Set the benchmark to **B**. In this procedure it is assumed that **B** is a number close to 1.0. If the benchmark is small, simply use 1 -- **B**.

2. Set the maximum length of the table, L, according to the formula

L=5/1-B

3. Set the derivation (reference) sample size according the formula

N = 3*L

4. Calculate the implied performance level, P, as that value which solves the equation

b = *ceiling*(B * N) - 1

b [SIGMA] k=0 (N k) P<k> (1-P)<N-k> = .01

5. Calculate the permitted number of misses, m for the sample size n, as the largest value of k that satisfies the following:

k [SIGMA] t=0 (n n-t) P<t> (1-P)<n-t> >/= .1

Mathcad worksheet to calculate small sample tables for percentage benchmarks.

Set benchmark.

B := .90

Set probability of failing the benchmark at the reference sample size.

P[crit] := .01

Set probability of failing the benchmark with small samples (Type I error rate).

P[T1E] := .1

Calculate the length of the Small Sample Adjustment Table

L := floor (5/1-b + .1)

L = 50

Calculate the reference (derivation) sample size.

N := 3.L

N = 150

"p" gives initial guesses at the required performance levels

p := 1+B/2

The following function calculates the performance level that is consistent with the reference sample size N and criterion probability P.

Given

pbinom(b - 1, N, p) = P[crit]

f(b, N) := Find(p)

This is the required performance level.

PL := f(ceil(B.N), N)
PL = 0.9441636

pbinom(ceil(B.N) - 1, N, PL) = 10.10<-3>

Calculate the minimum number of misses for which the cumulative probability is less than the Type I error criterion.

```
miss(n, P) := k <-- 1
    while pbinom(n - k, n, P) >/= P[T1E]
    k <-- k + 1
    return k - 1

n := 2 .. L

M[n] := miss(n, PL)

k := 1 .. 5

set(h, L, d) := j <-- 2
    x <-- L . (1 - d)
    while M[j] < h
    j <-- j + 1
    while (j </= L) . (M[j] = h)
    x <-- j if (d = 0) . (j < x) + (d = 1) . (j > x)
    j <-- j + 1
    return x

A[k, 0] := set(k, L, 0)

x[k] := k

set(1, 50, 0) = 2

A[k, 1] := set( k, L, 1)

A := augment(x, A)
```

In the following matrix,

the first column is the number of permitted misses, the second column is the minimum sample size that gets this number, and the third column is the maximum sample size that gets the number.

A = [0 1 2 3 4 5 0 2 10 21 32 45 0 9 20 31 44 50]

Exhibit 4

Measures and sub-measures identified as having no minimum samples size *

* See *Interim Opinion* (D.01-01-037), App. H, Attach. 1. OC services were added since they were included as a service group type in D.01-05-087.

Measure 30: Wholesale bill timeliness.

Measure 40: Average time to respond to a collocation request.

Measure 41: Average time to provide a collocation request.

UNE Loop DS-3: (Disaggregated as an Service Group Type).

UNE-Transport DS-1: (Disaggregated within UNE-Transport).

UNE-Transport DS-3: (Disaggregated within UNE-Transport).

Interconnection Trunks.

OC level services: (Service group type).

Appendix K: List of Appearances

Respondents: Ed Kolto-Wininger and James B. Young, Attorneys at Law, for Pacific Bell; Marlin Ard and Elaine M. Duncan, Attorneys at Law, for Verizon California Inc.

Interested Parties: Evelyn C. Lee, Attorney at Law, for WorldCom, Inc.; Randolph Deutsch and Joseph Faber, Attorneys at Law, for AT&T Communications of California, Inc.; Richard L. Goldberg, Attorney at Law, for Sprint Communications Company LP; Theresa L. Cabral, Attorney at Law, for Mediaone Telecommunications of California and Karen Potkul, Attorney at Law, for XO, Inc. (formerly, Nextlink, Inc.)

Office of Ratepayer Advocates: Julio Ramos, Attorney at Law.